INDIANA EDITION

ECLECTIC SERIES.

INTERMEDIATE GEOGRAPHY

No. 2.



CINCINNATI & NEW YORK.
VAN ANTWERP, BRAGG & CO.

12 Intermediate Geography owned by
Bass Klopfenstein Census of 1880

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BESS KLOPFENSTEIN

The Eclectic Series of Geographies.

AN

INTERMEDIATE GEOGRAPHY,

WITH

LESSONS IN MAP DRAWING.

BY

A. von STEINWEHR AND D. G. BRINTON.



VAN ANTWERP, BRAGG & CO.,

CINCINNATI: 137 WALNUT STREET. NEW YORK: 28 BOND STREET.

POPULATION OF CITIES AND TOWNS.

According to Almanach de Gotha 1884, the United States Census of 1880, and the State Censuses of 1884 and 1885.

UNITED STATES.

Akron, Ohio	16,512
Albany, N. Y.	90,758
Alexandria, Va.	13,659
Allegheny, Pa.	78,682
Allentown Pa.	18,063
Altoona, Pa.	19,710
Amsterdam, N. Y.	9,466
Annapolis, Md.	6,642
Atchison, Kan.('85)	15,599
Atlanta, Ga.	37,409
Attleboro, Mass.('85)	13,175
Auburn, Me.	9,555
Auburn, N. Y.	21,924
Augusta, Ga.	21,891
Augusta, Me.	8,665
Aurora, Ill.	11,873
Austin, Tex.	11,013
Baltimore, Md.	332,313
Bangor, Me.	16,856
Baton Rouge, La.	7,197
Bay City, Mich.('84)	29,412
Belleville, Ill.	10,683
Biddeford, Me.	12,651
Binghamton, N. Y.	17,317
Bloomington, Ill.	17,180
Boston, Mass. ('85)	390,393
Bridgeport, Conn.	27,643
Brockton, Mass.('85)	20,783
Brooklyn, N. Y.	566,663
Buffalo, N. Y.	155,134
Burlington, Ia.	19,450
Burlington, Vt.	11,365
Cambridge, Mass(85)	59,658
Camden, N. J. ('85)	52,884
Canton, Ohio	12,258
Cedar Rapids, Ia.	10,104
Charleston, S. C.	49,984
Charleston, W. Va.	4,192
Charlotte, N. C.	7,094
Chattanooga, Tenn.	12,892
Chelsea, Mass. ('85)	25,709
Chester, Pa.	14,997
Chicago, Ill.	503,185
Chicopee, Mass.('85)	11,516
Chillicothe, Ohio	10,938
Cincinnati, Ohio	255,139
Cleveland, Ohio	160,146
Cohoes, N. Y.	19,416
Columbia, S. C.	10,036
Columbus, Ga.	10,123
Columbus, Ohio	51,647
Concord, N. H.	13,843
Council Bluffs, Ia.	18,063
Covington, Ky.	29,720
Cumberland, Md.	10,693
Dallas, Tex.	10,358
Danbury, Conn	11,666
Davenport, Ia.	21,831
Dayton, Ohio	38,678
Denver, Col.	35,629
Derby, Conn.	11,650
Des Moines, Ia.	22,408
Detroit, Mich. ('84)	132,956
Dover, N. H.	11,687
Dubuque, Ia.	22,254
Easton, Pa.	11,924
East Saginaw, Mich.	29,085
Eau Claire, Wis.('85)	21,668
Elizabeth, N. J. ('85)	32,119
Elmira, N. Y.	20,541
Erie, Pa.	27,737
Evansville, Ind.	29,280
Fall River, Mass('85)	56,870
Fitchburg, Mass('85)	15,375
Fond du Lac Wis('85)	12726
Fort Wayne, Ind.	26,880
Frankfort, Ky.	6,958
Frederick, Md.	8,659
Galesburg, Ill.	11,437
Galveston, Tex.	22,248
Georgetown, D. C.	12,578
Gloucester Mass('85)	21,703
Grand Rapids, Mich.	41,898
Hagerstown, Md.	6,627
Hamilton, Ohio.	12,122
Hannibal, Mo.	11,074
Harrisburg, Pa.	30,762
Hartford, Conn.	42,015
Haverhill, Mass.('85)	21,795
Hoboken, N. J.('85)	37,721
Holyoke, Mass.('85)	27,895
Houston, Tex.	16,513
Indianapolis, Ind.	75,056
Ithaca, N. Y.	9,105
Jackson, Mich. ('84)	19,100
Jackson, Miss.	5,204
Jacksonville, Fla.	7,650
Jacksonville, Ill.	10,927
Jamestown, N. Y.	9,357
Jefferson City, Mo.	5,271
Jeffersonville, Ind.	9,357
Jersey City, N. J (85)	153,513
Johnstown, Pa.	8,380
Joliet, Ill.	11,657
Kalamazoo, Mich.	13,909
Kansas City, Mo.	55,785
Keokuk, Ia.	12,117
Key West, Fla.	9,890
Kingston, N. Y.	18,344
Knoxville, Tenn.	9,693
LaCrosse, Wis. ('85)	21,740
Lafayette, Ind.	14,860
Lancaster, Pa.	25,769
Lansing, Mich. ('84)	9,774
Lawrence, Mass.('85)	38,862
Leadville, Col.	14,820
Leavenworth, Kans.	29,268
Lewiston, Me.	19,083
Lexington, Ky.	16,656
Lincoln, Neb. ('85)	20,004
Lincoln, R. I. ('85)	17,229
Little Rock, Ark.	13,138
Las Vegas, N. Mex.	8,500
Lockport, N. Y.	13,522
Logansport, Ind.	11,198
Long Isl'd City, N. Y.	17,129
Los Angeles, Cal.	11,183
Louisville, Ky.	123,758
Lowell, Mass. ('85)	64,107
Lynchburg, Va.	15,959
Lynn, Mass. ('85)	45,867
Macon, Ga.	12,749
Madison, Wis. ('85)	12,064
Malden, Mass. ('85)	16,407
Manchester, N. H.	32,630
Marlboro, Mass.('85)	10,941
Memphis, Tenn.	33,592
Meriden, Conn.	15,540
Milford, Mass. ('85)	9,343
Milwaukee, Wis.	158,509
Minneapolis, Minn.	129,200
Mobile, Ala.	29,132
Montgomery, Ala.	16,713
Muskegon Mich('84)	17,825
Nashua, N. H.	13,397
Nashville, Tenn.	43,350
New Albany, Ind.	16,423
Newark, N. J. ('85)	152,988
New Bedford, Mass.	33,393
New Berne, N. C.	6,443
New Brighton, N. Y.	12,679
New Britain, Conn.	11,800
New Brunsw'k, N. J.	18,258
Newburgh, N. Y.	18,049
Newburyport, Mass.	13,716
New Haven, Conn.	62,882
New London, Conn.	10,537
New Orleans, La.	216,090
Newport, Ky.	20,433
Newport, R. I. ('85)	19,566
Newton, Mass. ('85)	19,759
New York, N. Y.	1,206,299
Norfolk, Va.	21,966
Norristown, Pa.	13,063
North Adams, Mass.	12,540
Northampton, Mass.	12,896
Norwalk, Conn.	13,956
Norwich, Conn.	15,112
Oakland, Cal.	34,555
Ogdensburg, N. Y.	10,341
Omaha, Neb. ('85)	61,835
Orange, N. J. ('85)	15,231
Oshkosh, Wis. ('85)	22,064
Oswego, N. Y.	21,116
Paterson, N. J. ('85)	63,273
Pawtucket, R. I.('85)	22,906
Peabody, Mass. ('85)	9,530
Peoria, Ill.	29,259
Petersburg, Va.	21,656
Philadelphia, Pa.	847,170
Pittsburgh, Pa.	156,389
Pittsfield, Mass.('85)	14,466
Portland, Me.	33,810
Portland, Ore.	17,577
Portsmouth, N. H.	9,690
Portsmouth, Ohio	11,321
Portsmouth, Va.	11,390
Pottsville, Pa.	13,253
Poughkeepsie, N. Y.	20,207
Providence, R. I.	118,070
Quincy, Ill.	27,268
Quincy, Mass. ('85)	12,145
Racine, Wis. ('85)	19,636
Raleigh, N. C.	9,265
Reading, Pa.	43,278
Richmond, Ind.	12,742
Richmond, Va.	63,600
Rochester, N. Y	89,366
Rockford, Ill.	13,129
Rock Island, Ill.	11,659
Rome, N. Y.	12,194
Rutland, Vt.	12,149
Sacramento, Cal.	21,420
Saginaw, Mich.('84)	13,760
Salem, Mass. ('85)	28,090
Salt Lake City, Utah	20,768
San Antonio, Tex.	20,550
Sandusky, Ohio	15,838
San Francisco, Cal.	233,959
San José, Cal.	12,567
Santa Fé, N. M.	6,635
Saratoga Sp'gs, N. Y.	8,421
Savannah, Ga.	30,709
Schenectady, N. Y.	13,655
Scranton, Pa.	45,850
Sedalia, Mo.	9,561
Selma, Ala.	7,529
Shenandoah, Pa.	10,147
Shreveport, La.	8,009
Somerville Mass('85)	29,971
South Bend, Ind.	13,280
Springfield, Ill.	19,743
Springfield Mass('85)	37,575
Springfield, Ohio	20,730
Stamford, Conn.	11,297
Steubenville, Ohio	12,093
St. Joseph, Mo.	32,431
St. Louis, Mo.	350,518
Stockton, Cal.	10,282
St. Paul, Minn('85)	111,397
Syracuse, N. Y.	51,792
Tallahassee, Fla.	2,570
Taunton, Mass. ('85)	23,674
Terre Haute, Ind.	26,042
Toledo, Ohio	50,147
Topeka, Kan. ('85)	23,499
Trenton, N. J. ('85)	34,386
Troy, N. Y.	56,747
Utica, N. Y.	33,914
Vicksburg, Miss.	11,814
Virginia City, Nev.	10,917
Waco, Tex.	7,295
Waltham, Mass.('85)	14,609
Warwick, R. I. ('85)	13,286
Washington, D.C.	147,293
Waterbury, Conn.	17,806
Watertown, N. Y.	10,697
Weymouth, Mass.	10,740
Wheeling, W. Va.	30,737
Wilmington, Del.	42,478
Wilmington, N. C.	17,350
Wilkesbarre, Pa.	23,339
Williamsport, Pa.	18,934
Winona, Minn. ('85)	15,624
Woburn, Mass. ('85)	11,750
Woonsocket, R. I.	16,199
Worcester, Mass('85)	68,389
Yonkers, N. Y.	18,892
York, Pa.	13,940
Youngstown, Ohio	15,435
Zanesville, Ohio	18,113

DOMINION OF CANADA.

Halifax	36,100
Hamilton	35,961
Kingston	12,407
London	19,746
Montreal	140,747
Ottawa	27,412
Quebec	62,446
St. John	26,127
St. John's	22,553
Toronto	86,415
Winnepeg	30,000

MEXICO, CENTRAL AMERICA AND WEST INDIES.

Aguas Caliente	31,872
Campeachy	14,000
Chihuahua	12,000
Colima	31,000
Gaudalajara	68,000
Guanajuato	56,112
Guatemala	58,456
Havana	230,000
Kingston	34,314
Leon	78,930
Managua	10,000
Matanzas	36,102
Mazatlan	12,000
Merida	36,000
Mexico	241,110
Port au Prince	27,000
Puebla	64,588
Puerto Principe	30,685
San Domingo	16,000
San Jose	12,000
San Juan	18,132
San Luis Potosi	34,300
San Salvador	14,059
Santiago de Cuba	36,752
Tegucigalpa	12,000
Vera Cruz	10,000
Zacatecas	32,000

SOUTH AMERICA.

Arequipa	29,237
Assumption	19,463
Bahia	128,929
Barquisimeto	26,664
Bogota	40,883
Buenos Ayres	323,585
Callao	33,502
Caracas	55,638
Chillan	19,044
Conception, Chili	18,277
Cordova	28,523
Cuzco	45,000
Cochabamba	40,678
Georgetown	36,572
Guayaquil	20,000
La Paz	26,000
Lima	101,488
Maracaybo	22,224
Maranhao	31,604
Medellin	30,000
Montevideo	73,353
Panama	18,378
Para	35,000
Paramaribo	22,191
Popayan	16,000
Potosi	22,580
Quito	80,000
Recife	116,671
Rio Janeiro	274,972
Santiago	190,000
Sucre	23,979
Talca	17,496
Tucuman	17,438
Valencia	36,145
Valparaiso	97,737

EUROPE.

Aberdeen	105,054
Adrianople	61,000
Aix-la-Chapelle	85,551
Altona	91,047
Amsterdam	350,201
Antwerp	175,636
Astrachan	48,220
Athens	63,374
Barcelona	248,943
Barmen	95,941
Basle	61,399
Belfast	174,394
Belgrade	30,000
Bergen	39,271
Berlin	1,122,330
Berne	44,087
Birmingham	400,757
Bologna	103,998
Bordeaux	221,305
Boulogne	40,075
Bradford	183,032
Bremen	112,453
Breslau	272,912
Brest	66,110
Brighton	107,528
Bristol	206,503
Bruges	44,968
Brunn	82,660
Brussels	165,350
Bucharest	221,000
Buda-Pesth	360,551
Cadiz	65,028
Carlsruhe	49,998
Catania	97,355
Chemnitz	95,123
Christiania	122,036
Cologne	144,772
Constantinople	650,000
Copenhagen	234,850
Cork	78,642
Dantzic	108,551
Dresden	220,818
Dublin	338,579
Dundee	142,454
Dusseldorf	95,458
Edinburgh	228,190
Elberfeld	93,538
Ferrara	75,444
Florence	122,039
Frankfort	136,819
Geneva	68,320
Genoa	138,081
Ghent	133,755
Glasgow	511,532
Göteburg	78,313
Granada	76,005
Gratz	97,791
Greenock	68,897
Groningen	48,896
Hamburg	289,859
Hanover	142,664
Havre	105,867
Hull	154,250
Kharkov	101,175
Kiev	127,251
Kishenau	112,137
Königsberg	140,909
Leeds	309,126
Leghorn	77,781
Leicester	122,351
Leipsic	149,081
Leith	61,168
Lemberg	109,726
Liege	126,233
Lille	178,144
Lisbon	246,343
Liverpool	552,425
London	3,814,571
Lyons	376,613
Madrid	500,900
Magdeberg	97,539
Malaga	115,882
Manchester	341,508
Marseilles	360,099
Messina	76,982
Milan	214,004
Moscow	611,974
Munich	230,023
Murcia	91,805
Nantes	73,225
Naples	463,172
Newcastle	145,228
Norwich	87,843
Nottingham	111,631
Nuremberg	99,519
Odessa	193,513
Oldham	111,343
Oporto	105,838
Palermo	205,712
Paris (1881)	2,269,023
Plymouth	75,096
Portsmouth	127,953
Prague	162,323
Rheims	93,823
Riga	168,844
Rome (1881)	273,268
Rotterdam	162,140
Roubaix	91,757
Rouen	105,906
Salonica	70,000
Serajevo	50,000
Seville	134,318
Sheffield	284,410
St. Etienne	123,813
Stettin	91,756
Stockholm	176,745
Stoke	152,457
St. Petersburg	876,575
Strasbourg	104,471
Stuttgart	117,303
Sunderland	116,262
The Hague	127,931
Toulon	70,103
Toulouse	140,289
Trieste	144,844
Turin	226,307
Utrecht	72,516
Valencia	143,861
Venice	129,276
Vienna	1,103,857
Warsaw	339,341
Wolverhampton	75,738

ASIA.

Agra	137,908
Ahmedabad	116,873
Aleppo	70,000
Allahabad	150,378
Amoy	88,000
Amritsur	135,813
Bagdad	40,000
Bangalore	142,513
Bangkok	500,000
Bareilly	101,688
Batavia	99,109
Benares	207,570
Beyroot	65,000
Bokhara	160,000
Bombay	753,000
Brusa	60,000
Cabool	80,000
Calcutta	683,458
Candahar	72,000
Canton	1,600,000
Cawnpore	119,603
Changchow	1,000,000
Ching Kiang	140,000
Chingtow	800,000
Damascus	150,000
Delhi	154,417
Erzeroom	60,000
Foochow	600,000
Hang Chow	600,000
Herat	40,000
Hong Kong	160,402
Han-keoo	600,000
Hyderabad	263,005
Ispahan	60,000
Jerusalem	28,000
Kaiseriyeh	60,000
Kagosima	54,316
Kanagawa	107,624
Kioto	239,425
Kumamotu	45,894
Lassa	43,000
Lucknow	284,779
Macao	60,000
Madras	405,948
Mandelay	100,000
Manila	270,000
Mecca	45,000
Meshed	60,000
Muscat	50,000
Nagasaki	39,566
Nagoya	118,450
Nankin	450,000
Ningpo	120,000
Osaca	293,686
Patna	158,900
Peking	500,000
Rangoon	98,745
Shanghai	272,234
Shao Hing	550,000
Siangtan	1,000,000
Singan	1,000,000
Singapore	60,000
Smyrna	150,000
Soo Chow	500,000
Surat	107,149
Tabriz	165,000
Takao & Taiwan	235,000
Tashkend	100,000
Teheran	200,000
Tientsin	930,000
Tiflis	104,024
Tokio (Yeddo)	823,557
Trebizond	50,000
Yank Chow	360,000
Yarkand	100,000
Yokohama	63,048

AFRICA.

Alexandria	165,752
Algiers	70,747
Cairo	327,462
Constantine	39,823
Fez	100,000
Khartum	35,000
Oran	58,530
Tunis	125,000
Zanzibar	80,000

AUSTRALIA.

Adelaide	38,479
Auckland	28,500
Ballarat	37,264
Brisbane	31,109
Christ Church	20,043
Dunedin	22,525
Geelong	17,200
Hobart	19,092
Melbourne	282,947
Sandhurst	34,991
Sydney	183,000
Wellington	20,563

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THIS volume is the second of the ECLECTIC SERIES OF GEOGRAPHIES. It is complete in itself, though designed to precede, in a course of study, the use of the third and larger work.

The authors have endeavored to treat the subject in as brief and concise a manner as possible, and yet to preserve that clearness and fullness of statement so desirable, and even indispensable, in a text-book for young pupils. To secure this end, they have limited themselves to statements of the essential facts and principles of the science, excluding all unimportant details and avoiding all lengthy descriptions.

The arrangement of the topics is the same as that of the other books of the series. The FIRST PART contains definitions and explanations; the SECOND PART, descriptions of the continents and their political divisions. The map is always on a left-hand page, the map questions facing it, and the descriptive text following the map questions. This arrangement will be found convenient for both teacher and pupil.

The topics of each descriptive chapter are presented in the order in which they should be studied to show their connection and dependence. The outline and position of the country under consideration are first given and defined. Then follows a description of the surface structure, including mountains, plateaus, and low plains. The rivers and lakes—the course and location of which depend upon surface structure—the climate, and the characteristic or peculiar plants and animals, are next described. Facts relating to the inhabitants, their ethnographic descent, their occupations, the states they have formed, and the cities they have built, follow the descriptions of the physical features, the productions, and the natural phenomena of each country. The questions upon the different parts of the descriptive text are numbered for ready reference to the paragraphs containing their answer.

It has not been deemed advisable to swell the volume to an inconvenient size by the insertion of a large number of questions. Those given clearly indicate the method of instruction recommended. Every thoughtful teacher will propound many others, suggested by an examination of the maps or demanded by the age and state of advancement of the pupils under his instruction.

The map questions are designed to assist the pupil in learning how to make his own geographical discoveries by a careful and intelligent examination of maps. These questions are entirely different in form from those upon the text. They are so constructed as to call the attention of the pupil to some object located and named upon the map, and the required answers are usually *names*. Questions upon the text require a descriptive answer, which the pupil can not be expected to give before he has studied both map and text.

Each chapter contains a brief lesson in map-drawing. The system adopted is simpler and much more easily learned than the somewhat intricate and difficult system of triangulation, which fills so large a space in several popular geographical text-books. The essential requisite, in map drawing from memory, is the location of those prominent points which determine the fundamental shape of the country whose map is to be drawn. This can be done most easily by the aid of a number of equal squares within or upon the sides of which these points may be located. The pupil can readily fill in the details, provided he has previously studied an accurate map; but not otherwise. Constructive map drawing, by impressing exact ideas of form and relative position upon the memory, thus becomes a useful and attractive exercise.

The sincere thanks of the authors are due to THOMAS W. HARVEY, Esq., of Painesville, Ohio, for valuable suggestions in the preparation of the series, and for able assistance in correcting both manuscript and proofs.

The authors have endeavored to prepare a clear, concise, and thoroughly practical work, and trust that its use in our schools will be productive of satisfactory results.

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NOTE.—On the maps of this book, the lowlands are colored with a brown tint. Elevations of more than one thousand feet are left uncolored.

INTERMEDIATE GEOGRAPHY.

PART I. GENERAL GEOGRAPHY.



I. THE EARTH.

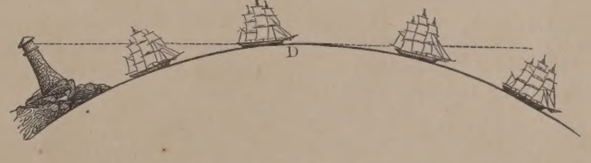
1. **Geography** is a description of the earth and its inhabitants. It treats of the form and size of the earth; of the land, the water, and the atmosphere; of the plants and animals; and of the different nations living upon the earth.

2. **Planets** are bodies which revolve or travel around the sun, and receive light and heat from it. There are more than an hundred planets. Our earth is one of eight of these planets, which are enormously larger than the rest.

3. The **form** of the earth is nearly that of a globe or sphere. These terms signify a round ball.

4. **Proof that the Earth is Round.**—We can see so small a portion of the earth's surface at once, that its curvature is not visible. The following fact proves its rotundity.

When a ship sails from us, the hull first disappears from view, then the lower parts of the masts, and at last their tops. This would not be the case if the surface of the water were flat like the top of a table. Hence we conclude that the earth is round.

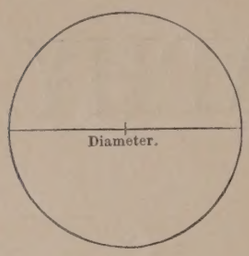


In the figure, a ship receding from a spectator is shown in four different positions. The dotted straight line is the spectator's line of sight. At D this line touches the surface of the water. While the ship is beyond the point D, only those parts of it which are above this line can be seen.

QUESTIONS.—1. What is geography? Of what subjects does geography treat?—2. What are planets? What is the earth?—3. What is the form of the earth?—4. Why does the surface of the earth appear level? Give a proof that the earth is round.

II. THE HORIZON.

5. A **circle** is a plane figure bounded by a line, every point of which is equally distant from a point within called the *center*. This line is called the *circumference*.



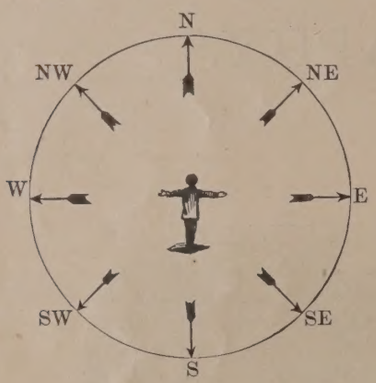
A Circle.

A **diameter** of a circle is a straight line passing through the center and limited at both ends by the circumference.

6. When we are on the sea, or on an extensive plain, where our view is unobstructed, the portion of the earth's surface which we see is a circle.

The **Horizon** is the circumference of this circle, or the line which bounds our view.

7. The point in the horizon where the sun rises is the **East**; where it sets, the **West**. If our right side is turned toward the east and our left toward the west, our face is toward the **North** and our back toward the **South**.



Points in the Horizon.

8. North, South, East, and West, are called the **cardinal points**. Half-way between them there are four other points: North-east, South-east, North-west, and South-west. These are called the **semi-cardinal points**.

9. The **Compass** is an instrument in common use to ascertain these points. It consists of a round box containing a magnetic needle (A), supported in such a manner that it swings freely upon a pivot (C).



A Compass.

One end of this needle always points nearly to the north; the other, to the south. Knowing the direction of these points, we can easily determine that of the others.

QUESTIONS.—5. What is a circle? What is the circumference of a circle? What is a diameter?—6. What is the horizon?—7. Which point in the horizon is the east? Which point is the west? Which point is the north? Which point is the south? 8. What are north, south, east, and west called? What other points lie half-way between the cardinal points?—9. Describe a compass. In what direction does the magnetic needle point?

III. LINES AND CIRCLES UPON THE EARTH.

10. The **diameter** of a sphere, or globe, is a straight line passing from one side through the center to the opposite side.

11. The earth rotates, or turns upon one of its diameters. The **Axis** is the diameter upon which the earth rotates.

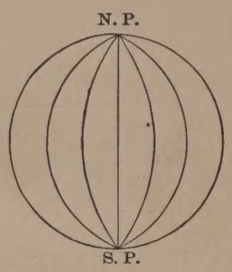
The **Poles** are the ends of the axis. The North Pole is the northern end; the South Pole, the southern.

12. A number of great and small circles are imagined to be drawn upon the earth's surface.

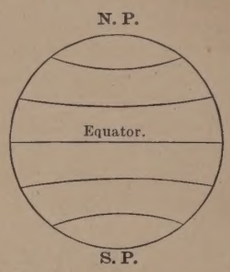
A **great circle** is one that divides the earth into two equal parts, called **hemispheres**, or half spheres.

A **small circle** is one that divides the earth into two unequal parts.

13. The **Equator** is the circumference of a great circle passing around the globe, midway between the poles. It divides the earth's surface into a northern and a southern hemisphere.



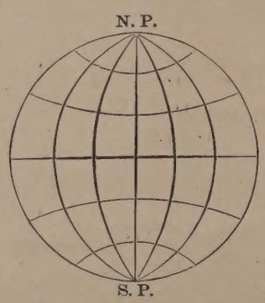
Meridians.



Parallels.

14. **Parallels** are circumferences of small circles passing around the earth in the same direction as the equator.

15. **Meridians** are semi-circumferences of great circles passing from one pole to the other.



Meridians and Parallels.

16. The circumference of a circle is divided into 360 equal parts, called **degrees.** The length of the equator and of each parallel is 360 degrees; of each meridian, 180 degrees.

17. One meridian is assumed as the **prime meridian,** and is designated by zero (0); the others are numbered to the eastward and westward from the prime meridian.

The meridian which passes through the British Observatory at Greenwich, near London, is most frequently used as the prime meridian.

18. The equator is designated by zero (0), like the prime meridian, and the parallels are numbered to the northward and southward from the equator.

19. The **Longitude** of a place is the distance of its meridian from the prime meridian, expressed in degrees and parts thereof.

The **Latitude** of a place is the distance of its parallel from the equator, expressed in degrees and parts thereof.

20. Longitude is measured upon the equator and the parallels; latitude is measured upon the meridians. If we wish to describe the location of a place upon the earth's surface, we give its latitude and longitude.

Thus we say: Philadelphia lies in 40 degrees north latitude and 75 degrees west longitude. This means that Philadelphia lies where the parallel 40° north of the equator and the meridian 75° west of the prime meridian intersect each other.

21. Meridians are of equal length; parallels decrease in length from the equator to the poles. Hence, the length of degrees of latitude, being equal to parts of meridians, is nearly the same in all parts of the globe.

Degrees of longitude are longest on the equator, and decrease toward the poles, because they are equal parts of parallels.

22. A degree of latitude or longitude is divided into 60 minutes, and a minute is divided into 60 seconds. 30° 15′ 53″ N. L. is read 30 degrees, 15 minutes, and 53 seconds north latitude; 40° 13′ 22″ E. L. is read 40 degrees 13 minutes and 22 seconds east longitude.

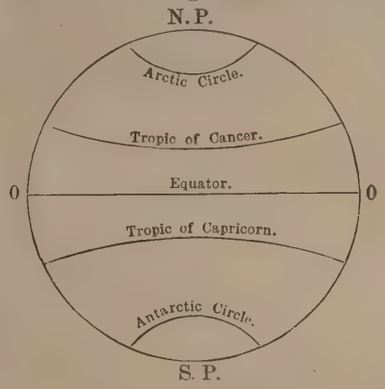
23. The earth's axis is nearly 8,000 miles long; the equator and other great circles, 25,000 miles. The earth's surface measures nearly 200,000,000 square miles.

QUESTIONS.—10. What is the diameter of a sphere? 11. What is the axis of the earth? What are the poles?—12. What is a great circle? A small circle?—13. What is the equator? How does it divide the earth? 14. What are parallels?—15. What are meridians?—16. Into how many degrees is the circumference of a circle divided? How many degrees are comprised in a meridian?—17. What is the prime meridian? How are the other meridians numbered?—18. How is the equator designated? How are the parallels numbered?—19. What is longitude? What is latitude? 20. Upon what is longitude measured? Upon what is latitude measured?—21. What is said of the length of meridians? Of the length of parallels? Of the length of degrees of latitude? Why are they of equal length? What is said of the length of degrees of longitude?—22. How is a degree of latitude or longitude divided?—23. How long is the earth's axis? The equator? What is the area of the earth's surface?

IV. TROPICS, POLAR CIRCLES, AND ZONES.

24. The **Tropics** are parallels 23½° from the equator in both the northern and the southern hemisphere. The *Tropic of Cancer* is the parallel of 23½° north latitude. The *Tropic of Capricorn* is the parallel of 23½° south latitude.

25. The **Polar Circles** are parallels 23½° from the poles. The *Arctic Circle* is 23½° from the north pole. The *Antarctic Circle* is 23½° degrees from the south pole.



Equator and Parallels.

The polar circles are the parallels of 66½° north and south latitude.

26. These four parallels and the equator divide the earth into six belts or **zones**—three in the northern hemisphere and three in the southern. They are as follows:

(1) The **Torrid zones** lie between the equator and the tropics. The *north torrid zone* extends from the equator to the tropic of Cancer; the *south torrid zone*, from the equator to the tropic of Capricorn.

(2) The **Temperate zones** lie between the tropics and the polar circles. The *north temperate zone* extends from the tropic of Cancer to the Arctic circle; the *south temperate zone*, from the tropic of Capricorn to the Antarctic circle.

(3) The **Frigid zones** surround the poles, and are bounded by the polar circles. The *north frigid zone* is bounded by the Arctic circle; the *south frigid zone*, by the Antarctic circle.

QUESTIONS.—24. What are the tropics? What is the tropic of Cancer? The tropic of Capricorn?—25. What are the polar circles? Which polar circle is in the northern hemisphere? Which in the southern?—26. Into what do the equator, the tropics, and the polar circles divide the earth? How many zones are there in each hemisphere? Name the three zones in each hemisphere. Where is the north torrid zone? The south torrid zone? The north temperate zone? The south temperate zone? The north frigid zone? The south frigid zone?

V. MOVEMENTS OF THE EARTH.

27. The earth has two movements. It *rotates* upon its axis and it *revolves* around the sun.

The **orbit** is the path in which the earth travels in its revolution around the sun. The other planets have the same movements of rotation and revolution.

28. The earth rotates from west to east. This makes the sun appear to rise in the east and to set in the west; but this movement is only *apparent*. The sun *rotates* on its own axis, but it is stationary as regards the earth. It is the earth that moves.

29. The earth rotates once during a *day* of twenty-four hours. One half of its surface receives light from the sun at once; the other half is then in darkness.

It is *day* upon the part turned toward the sun; *night* upon the part turned from the sun.

30. The earth completes its journey around the sun in a *year* of 365¼ days.

The revolution of the earth around the sun is one cause of the changes of the *seasons*.

When the northern hemisphere has summer, the southern has winter; and when the northern hemisphere has spring, the southern has fall.

QUESTIONS.—27. What two movements has the earth? What is the orbit of the earth?—28. In what direction does the earth rotate?—29. In what time does the earth rotate once? Upon what part is it day? Upon what part is it night?—30. In what time does the earth complete its revolution around the sun? What changes are partly caused by this revolution?

VI. LAND AND WATER.

31. The surface of the earth consists of **land** and **water**. Three fourths of it are water and one fourth is land. The water forms a continuous area, the **Sea**. The land is distributed into many separate areas, the continents and islands.


A Strait.

32. The three largest bodies of land are called **Continents**; the smaller, **Islands**. Both islands and continents are entirely surrounded by water.

33. The **coast**, or **shore**, is the line where land and water meet. It is nearly always a crooked line, for the land some-

times projects into the water, and the water sometimes extends into the land.

34. The curves of the shore determine the forms of land and water. These have received different names.

A **Gulf, Bay,** or **Inlet** is a part of the water which extends into the land.

A **Peninsula** is a portion of the land which projects into the water, and is nearly surrounded by it.

35. A **Strait,** or **Channel,** is a narrow passage which connects two larger bodies of water.

An **Isthmus** is a narrow neck of land which connects two larger bodies of land.

A **Cape** is a point of land projecting into the water.

36. In some places, the *surface* of the land is but a few feet higher than the level of the sea; in other places, it is as much as five miles above it.

37. Those parts which are less than 1000 feet above the sea-level, are called **Lowlands**; those which are more than 1000 feet above it, are called **Highlands**.

38. **Low plains** are flat or level tracts of lowlands; **Plateaus,** or **Table-lands,** are level highlands. **Mountains** and **Hills** are masses of rock and earth which rise considerably above the surrounding country.

The *summit* is the highest point of a mountain. The *base,* or *foot,* is the line where the mountain begins to rise. The *slopes* are the sides from the summit to the base.

39. Mountains generally have the form of elongated **ranges,** or **chains**.

The *crest* is the line along the top of a range. *Peaks* are its highest points. *Passes* are cuts or depressions in a crest.

A **Mountain System** consists of several chains which extend across a country near together.



A Volcano.

40. The **trend** of a mountain chain is the direction in which it extends.

Thus we say: "The Rocky Mountains have a north and south trend," or "trend north and south."

41. **Valleys** are depressions between ranges of mountains or hills.

42. A **Volcano** is a mountain, from which issue smoke, cinders, and molten rock, called *lava.* The vent, or *crater,* is usually in a bowl-shaped depression.

QUESTIONS.—31. Of what does the surface of the earth consist? How large a portion is water? How large a portion is land? What is said of the sea? Of the land?—32. What are continents? What are islands?—33. What is the coast? What is said of it?—34. What is a gulf? Give two other terms for gulf. What is a peninsula?—35. What is a strait or channel? An isthmus? A cape?—36. What is said of the surface of the land?—37. What are lowlands? Highlands?—38. What are low plains? Plateaus or table-lands? What are mountains and hills?—39. What form have mountains generally? What is a mountain system? What are peaks?—40. What is the trend of a mountain chain?—41. What are valleys?—42. What is a volcano?

VII. INLAND WATERS.

43. **Inland Waters** are the bodies of water upon the surface of the continents and islands. There are three principal kinds of inland waters: springs, rivers, and lakes.



A Lake.

44. **A Spring** issues from the ground and forms a *brook.* As this flows along, it receives the waters of many other brooks, grows deeper and wider, and becomes a *creek.*

45. A **River** is a large stream of water flowing in a channel. It is formed by the union of numerous brooks and creeks, and differs from them only in size.

46. The *mouth* of a river is the place where it empties into another body of water—a river, a lake, or the sea.

The *source* of a river is one of its springs—usually that which is farthest from the mouth.

Tributaries, or *affluents,* are the rivers, creeks, and brooks which empty into another body of water.

47. A **River System** is the entire network formed by a river and its tributaries.

The *basin* of a river system is the region which it drains.

A river system is said to "drain" its basin, because it carries off the surplus water which falls on it in the form of rain or snow.

48. A **Water-shed** is the *boundary line* which separates one river system from another. This is sometimes a mountain range, but quite as frequently a gentle swell of the ground in a low plain.

49. The *course* of a river is the direction in which it flows. The *bed* is the depression in the ground, which is covered or filled by the water.

The *banks* of a river are its shores. The *right bank* is that which is on the right hand of a person descending the river; the *left bank* is that on the left hand.

Rivers seldom flow far in a straight line, but turn from one side to the other, so that their courses are more or less crooked.

50. **Lakes** are bodies of water which fill depressions in the surface of the land. They receive their supply of water from the rivers and creeks which empty into them.

Most of the rivers and lakes empty into the sea either directly or indirectly. There are, however, some which have no connection with the sea. They occur usually in the interior plateaus of the continents.

Humboldt River and Great Salt Lake, both in the western part of our country, belong to this class.

QUESTIONS.—43. What are inland waters? Name three kinds of inland waters.—44. What is formed by the water from a spring?—45. What is a river?—46. What is the mouth of a river? The source? What are tributaries, or affluents?—47. What is a river system? What is the basin of a river?—48. What is a water-shed?—49. What is the course of a river? The bed? What are the banks? Which is the right bank? Which the left?—50. What are lakes?

VIII. MAPS AND GLOBES.

51. A **map** is a drawing of the whole or a part of the earth's surface.

In a picture, objects are represented as they appear to a spectator standing before them. A map indicates the relative position of objects and the distances between them, by means of marks and lines.

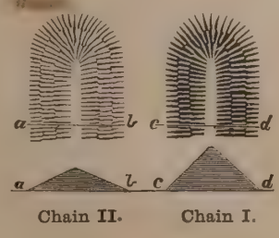
52. The coast is represented on a map by a curved line, separating the water from the land; rivers, by crooked lines increasing in width from the source to the mouth; boundaries of states, by dotted lines; towns, by small circles; and large cities, by figures resembling them in outline.

See the city of New York on the map of the Middle States.

53. Mountains are shown by shading their slopes with short lines, and leaving the tops and crests plain.

In every good map, the declivity, or steepness, of the slope is indicated by the shading. This enables us to compare the elevation of mountains on the same map.

This is shown in the annexed figure. Both mountains, it will be seen, are of equal width. Chain I. is shaded more darkly than Chain II. This indicates that the former is higher than the latter. The sections taken across the lines *a b* and *c d* further illustrate this point.



Chain II. Chain I.

54. In this book, the low plains are lightly colored with a brown tint. The plateaus and mountain regions are not colored; the highlands are thus readily distinguished from the lowlands.

55. We can not tell the *real size* of a country by a map unless a **scale** is marked upon it.

The maps of this book have such a scale given, which enables the pupil to measure the distances between places.

The maps of the grand divisions contain a small map of Pennsylvania, drawn on the same scale as the grand division. By carefully comparing the two, an estimate may be formed of the size of the various countries and regions the grand division contains.

Thus, on the map of Africa, the pupil will see that the island of Madagascar is about five times as large as Pennsylvania.

On the maps of the United States, Canada, Mexico, Western and Central Europe, a square of a thousand square miles is used for the same purpose.

56. Maps are usually so constructed that the top is north; the bottom, south; the left hand, west; the right hand, east.

It should, however, be remembered, that the true north and south directions are indicated by the meridians; and the true east and west directions, by the parallels.

57. The whole earth is most correctly represented by an **artificial globe,** on which the continents, islands, and oceans are drawn according to their relative position, size, and form.

58. We can not see more than one half of such a globe at the same time; but if it be cut through the center, the two halves, or *hemispheres,* may be so placed as to show the entire rounded surface at once.

Map I., on the next page, represents the whole surface of the earth somewhat as you would see it on the two half globes. It is a *map of the hemispheres.*

QUESTIONS.—51. What is a map? What is the difference between a map and a picture?—52. How is the coast represented on maps? How are rivers represented? Boundaries? Towns? Large cities?—53. How are mountains shown? How is the steepness of the slopes indicated?

54. How are low plains and plateaus distinguished on the maps of this book?—55. For what purpose is a scale given on the maps of this book? The small map of Pennsylvania on the maps of the grand divisions? The square of a thousand square miles on the other maps?

56. Where is north on maps? Where south? East? West? What lines indicate the north and south directions? What lines indicate the east and west directions?—57. By what is the whole earth most correctly represented?—58. How does a map of the hemispheres represent the whole earth?

IX. DISTRIBUTION OF LAND AND WATER.

59. The meridian 20 degrees west, and 160 degrees east, of Greenwich, form a great circle, which divides the earth into an **Eastern** and a **Western Hemisphere.**

60. The *Eastern Continent* and the *Australian Continent* are on the Eastern Hemisphere. The *Western Continent* is on the Western Hemisphere.

61. The **Eastern** Continent is the largest. It contains more than half of all the land on the globe.

The **Western** Continent is about half as large as the Eastern.

The **Australian** Continent is the smallest. It contains less than one tenth of the land on the earth's surface.

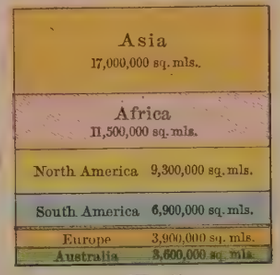
62. The Eastern Continent is divided into three grand divisions: **Europe, Asia,** and **Africa.** The Western is divided into two grand divisions: **North America** and **South America.** The Australian Continent includes but one grand division: **Australia.**

MAP OF THE HEMISPHERES

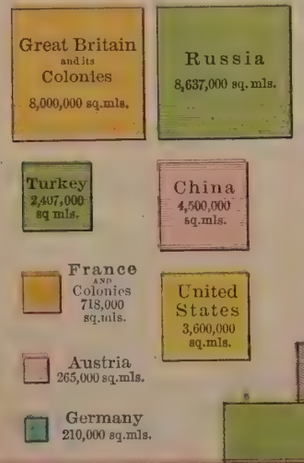
by A. von Steinwehr, A.M.



THE GRAND DIVISIONS compared as to Area.



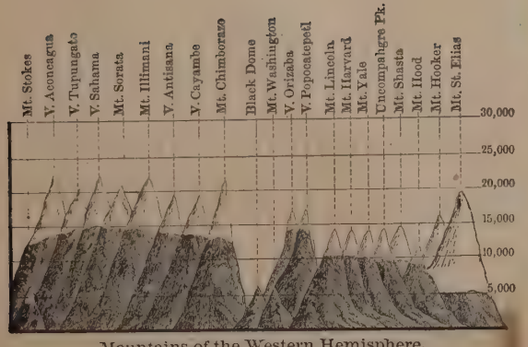
The principal States of the World compared as to Area.



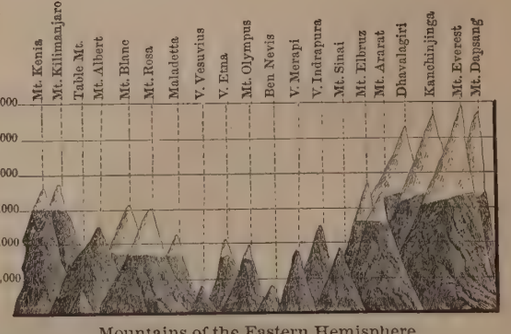
The principal States of the World compared as to Population.



THE GRAND DIVISIONS compared as to Population.



Mountains of the Western Hemisphere.



Mountains of the Eastern Hemisphere.

63. Most of the islands lie near the continents, and are considered as belonging to the grand divisions. Each of the grand divisions, therefore, consists of the whole or a part of one of the three continents and the adjacent islands.

The term *continent* is frequently applied to the main-land of a grand division, as distinct from the adjoining islands. Thus, we speak of the continent of Europe and the islands of Europe, which together make up the grand division of Europe.

64. The **Sea** is divided by the continents into five oceans.

The **Arctic** Ocean surrounds the north pole.

The **Antarctic** Ocean surrounds the south pole.

The **Atlantic** and **Pacific** Oceans extend from north to south, and join the Arctic and Antarctic Oceans.

The polar circles are considered the northern and southern boundaries of the Pacific and Atlantic Oceans.

The **Indian** Ocean lies north of the Antarctic Ocean, and south of Asia.

65. Three fourths of the earth's surface is water, and one fourth is land.

The Eastern Hemisphere contains more than twice as much land as the Western.

QUESTIONS.—59. What two meridians divide the earth into the eastern and western hemispheres?—60. What two continents lie on the eastern hemisphere? What continent lies on the western hemisphere?—61. Which is the largest continent? Which is the second in size? Which is the smallest?—62. Into what grand divisions is the eastern continent divided? The western? What grand division does the Australian continent include?—63. What is said of most of the islands? Of what does each grand division consist?

64. Into how many oceans is the sea divided? Name them. Where is the Arctic Ocean? The Antarctic? The Atlantic? The Pacific? The Indian?—65. What is the proportion of land and water on the earth's surface? Which has the most land, the eastern or the western hemisphere?

THE HEMISPHERES.

MAP QUESTIONS.

What three grand divisions lie wholly in the northern hemisphere? What two lie partly in the northern and partly in the southern hemisphere? What one lies wholly in the southern hemisphere?

What three grand divisions lie partly in the north frigid zone? Does any continent extend into the south frigid zone? What grand divisions lie partly in the north temperate zone? In the south temperate zone? In the torrid zones? What ocean lies wholly in the eastern hemisphere? Nearest what pole do the great continents lie?

What cape at the southern end of South America? What cape at the southern end of Africa? What isthmus connects North and South America? What isthmus connects Asia and Africa?

What sea north of South America? What gulf north-west of the Caribbean Sea? What bay in the north-eastern part of North America?

What sea between Europe and Africa? What sea between Asia and Africa? What sea and what bay extend into Asia from the Indian Ocean?

Name the largest islands south-east of Asia. What large island north of Australia? What island south of Australia? What island east of Africa? In what ocean does Madagascar lie? What channel separates Madagascar from the continent?

What islands in the south-western part of the western hemisphere? What islands in the Pacific Ocean west of North America?

If you were to sail east from New York, what grand division would you reach? What grand division, if you sailed south-east from New York? What grand division would you reach, if you sailed east from southern Africa? If you sailed east from Australia? If you sailed east from Asia?

What grand divisions would you cross, if you traveled around the globe along the 20th degree north latitude? If you traveled along the 20th degree south latitude?

The heights of the loftiest peaks in either hemisphere are given below the map. There are also tables showing the comparative areas and the comparative populations of the several Grand Divisions and principal States of the world. Their study will enable the pupil to answer the following questions:

What is the highest mountain in the world? In which hemisphere is it situated? (The height of the mountains is given in feet: 5280 feet are one English mile.) How many miles high is Mt. Everest? What is the loftiest peak in the western hemisphere? How many miles high is Mt. Aconcagua? Name the four highest peaks in the eastern hemisphere. The four highest peaks in the western hemisphere.

Name the Grand Divisions in the order of their areas, beginning with the largest. Name them in the order of their populations. What rank does Europe hold in area? In population? Name the principal States of the world in the order of their areas. In the order of their populations.

X. CLIMATE.

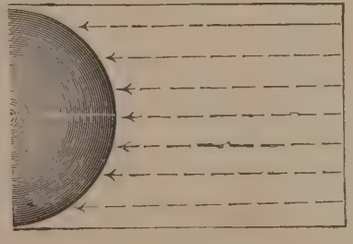
66. The earth is surrounded by the **air**, or the **atmosphere**. **Climate** is the condition of the atmosphere as regards heat, winds, and moisture.

67. The surface of the earth receives **heat** from the sun.

The amount of heat which any portion of the earth receives, depends chiefly upon its latitude.

68. The sun shines most directly upon the *torrid zones*, and most obliquely upon the *frigid zones*. Hence, those regions lying in the torrid zones have a very hot climate, and those lying in the frigid zones, a very cold climate.

69. The *temperate zones* receive the sun's rays neither so directly as the torrid, nor so obliquely as the frigid zones. Their climate is moderate, or temperate.



We may, therefore, know something of the climate of a country by ascertaining its latitude; that is, its *distance from the equator*.

The dotted lines in the figure represent the direction of the sun's rays. The nearer a point lies to the poles, the more slanting the rays fall upon it.

70. The summits of high mountains are always cold. At a height of 16,000 feet above the sea-level, the snow never melts, even in the hottest parts of the globe.

The city of Quito, in South America, is situated on a table-land of the Andes, nearly 10,000 feet above the sea-level. Although upon the equator, its climate is as cool and pleasant as our finest spring weather.

71. **Winds** are currents of air. Whenever a portion of the earth's surface becomes warmed by the sun's rays, the air above it rises, and currents of air move toward it from the colder parts.

Winds are named according to the point of the compass from which they blow. Thus, a north wind comes from the north and moves to the south; a south-west wind comes from the south-west, and moves to the north-east.

72. In the equatorial regions, which receive the greatest amount of heat, winds prevail which blow constantly from the colder regions.

These winds are called the *trade-winds*, or the *trades*, because they are of great importance to commerce.

North of the equator, the trade-winds blow from the north-east; south of it, from the south-east.

73. In the temperate and frigid zones, the winds are very irregular and variable; but are most frequently from the west, south-west, or north-west.

74. When a vessel of water is exposed to the air, the water soon dries up, or evaporates, forming aqueous or watery vapor. The atmosphere always contains aqueous vapor.

75. When the amount of aqueous vapor in the atmosphere is small, it is invisible; when large, it often becomes visible and forms *clouds*.

76. *Rain* is water falling in drops from the clouds. *Snow* is rain frozen into flakes.

The sea is the chief source from which the atmosphere derives its supply of moisture.

The winds carry it over the land, and, descending as rain and snow from the clouds, it feeds the springs and rivers, which carry it back again to the ocean.

QUESTIONS.—66. By what is the earth surrounded? What is climate? 67. Whence does the earth's surface receive heat?—68. On what zones does the sun shine most directly? On what zones does it shine most obliquely? What results from this?—69. What is said of the temperate zones?—70. At what height above the sea-level does snow never melt?

71. What are winds?—72. What winds prevail in the equatorial regions? From what point of the horizon do the trades blow, north of the equator? From what point, south of the equator?—73. What is said of the winds in the temperate and frigid zones?

74. What does the atmosphere always contain?—75. What is said of the aqueous vapor in the atmosphere?—76. What is rain? What is snow? Whence does the atmosphere derive its chief supply of moisture?

XI. PLANTS AND ANIMALS.

77. **Plants** grow on almost every part of the earth. The land is covered with trees, shrubs, and herbs; the waters also teem with vegetable life.

The sea has its sea-weeds; lakes and rivers, their lilies and other water-plants. The rocks are adorned with delicate mosses and lichens; and even the snow of the polar regions and that on lofty mountains is sometimes covered with minute forms of vegetation.

78. The distribution of plants is regulated by *temperature* and *moisture*.

Vegetation is most luxuriant in the torrid zones. Lofty trees tower upward, and their stems are often covered with creeping plants to the very top. Here grow the banana and the plantain, the bread-fruit tree, and various kinds of palms.

79. Large portions of these zones, however, are without vegetation, because rains never fall upon them. Such tracts are called *deserts*. The Sahara, in Africa, is the largest desert on the globe.



Jaguar. Lion. Cougar.
Royal Tiger. Lynx.

80. In the temperate zones, we find extensive forests composed of trees covered with foliage in summer, but leafless in winter. Such trees are called *deciduous*. Maples, oaks, beeches, and walnuts belong to this class.

Forests of pines, firs, and other *coniferous* trees, which remain green throughout the year, cover the colder parts of the temperate zones. These are called *evergreens*.

81. In the frigid zones, vegetation is very limited. Forests of pines and firs cover the warmer parts, but in the colder parts the climate is too rigorous even for these hardy trees. Only mosses, lichens, and small shrubs grow in these cold regions.

82. The distribution of **animals** depends upon climate and the distribution of plants.

The animals of the torrid zones are distinguished by their great size, strength, and variety. Here are found the lion, the tiger, the giraffe, the elephant, the hippopotamus living in the African rivers, and a great variety of monkeys and apes.

83. The principal wild animals living in the temperate zones are the black, the brown, and the grizzly bear; the stag, the deer, and the buffalo.

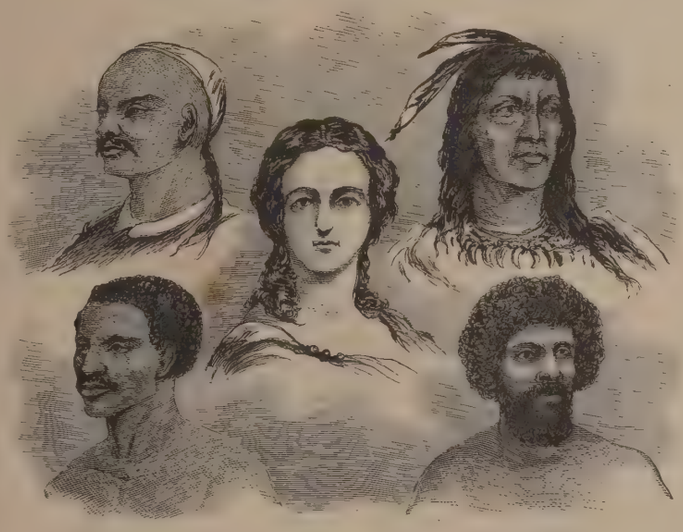
In the frigid zones, we find the fierce white, or polar bear, the white fox, the sable, and other animals yielding valuable furs.

84. *Domestic* animals are those which man has tamed, or domesticated, for various purposes. The natives of the arctic zone employ dogs and reindeer to draw their sledges. In the temperate zones, horses, cattle, sheep, and swine are the principal domestic animals. In the torrid zones, the camel and the elephant are much used as beasts of burden.

QUESTIONS.—77. What is said of plants?—78. By what is the distribution of plants regulated? What is said of the vegetation in the torrid zones?—79. What are deserts? Which is the largest desert on the globe?—80. What forests are found in the temperate zones? Name some deciduous trees. What forests are in the colder parts of these zones?—81. What is said of the vegetation of the frigid zones?

82. Upon what does the distribution of animals depend? What distinguishes the animals in the torrid zones? Name some of them.—83. Name some of the principal animals in the temperate zones. In the frigid zones. 84. What are domestic animals? What are the domestic animals of the frigid zones? What are the principal domestic animals in the temperate zones? Name the domestic animals in the torrid zones.

XII. THE RACES OF MEN.



Mongolian. Ethiopian. Caucasian. American. Malay.

85. The number of men upon the earth is estimated at 1,439,500,000. They are distributed over nearly all the land areas of the earth. A few islands in the coldest parts of the frigid zones alone are without inhabitants.

86. The people living in different parts of the world differ from each other in color, figure, and other peculiarities. They are accordingly said to belong to the following five races:

(1) The **Caucasian**, or White race; (2) The **Ethiopian**, or Black race; (3) The **Mongolian**, or Yellow race; (4) The **Malay**, or Brown race; (5) The **American**, or Red race.

87. The **White** race is superior to all the others in intelligence and civilization. It occupies south-western Asia, northern Africa, and nearly the whole of Europe. Large parts of North America, South America, and Australia are also inhabited by people belonging to this race.

The White Race is divided into three branches, the most important of which is the *Aryan*. To this branch belong the English, the Americans, the Germans, the French, the Italians, the Spaniards, the Russians, and the Poles.

88. The **Black** race has a low forehead, a broad nose, a large mouth, and coarse, woolly hair. This race inhabits the larger part of Africa.

The negroes in North and South America are the descendants of slaves brought from Africa a long time ago.

89. The **Yellow** race has small eyes, large cheek bones, and coarse black hair. Its home is in central and northern Asia. The Chinese, the Japanese, the Turks, and many other nations belong to it. It is the most numerous race.

90. The **Brown** race is dark brown or nearly black. It inhabits Australia, and the islands of the Indian and Pacific oceans.

91. The **Red** race inhabits the uncultivated portions of North and South America, and is divided into numerous tribes. This race have large dark eyes, straight black hair, high cheek bones, and red or copper-colored skin.

QUESTIONS.—85. What is the number of men upon the earth?—86. Name the five races.—87. What is said of the white race? What parts of the world does it occupy?—88. Describe the black race. Where is it found?—89. Describe the yellow race. Where is its home?—90. What countries are inhabited by the brown race?—91. In what countries is the red race found?

XIII. MANNER OF LIVING.

92. The nations of the world are divided, with regard to their manner of living, into three classes: (1) Barbarous, or Savage; (2) Half-civilized; (3) Civilized.

93. **Barbarous**, or **Savage** nations have no fixed homes, but rove about from place to place in search of food, clothing, and shelter. They are usually fishermen or hunters.



Indian Killing Buffalo.

94. **Half-civilized** nations have usually fixed homes and settlements, cultivate the ground, and raise domestic animals. They carry on the simpler mechanical trades and a limited commerce.

Some half-civilized nations are *nomads*. They own large herds of cattle and horses, and wander with them from pasture to pasture. They have good clothing, and live in comfortable tents. Many Mongolian tribes in central Asia are nomads.

95. **Civilized** nations are actively engaged in agriculture, manufacturing, and commerce. Law and order are maintained by them. Life and property are protected. They have books and schools, and cultivate the arts and sciences.

The nations of western Europe, and their descendants in all parts of the world, are the most highly civilized.

QUESTIONS.—92. Into what three classes are nations divided according to their manner of living?—93. Describe barbarous, or savage nations.—94. Half-civilized nations. Nomads.—95. What is said of civilized nations?

XIV. OCCUPATIONS.

96. We require **food**, **clothing**, and **shelter.** The materials for the supply of these necessities are products of nature—minerals, plants, or animals. We must labor in order to get them and render them fit for use.

97. Among civilized nations, this labor is divided so that ordinarily each man performs but one kind of labor, or has but one **occupation.** The principal occupations are: (1) Mining; (2) Agriculture; (3) Manufacturing; and (4) Commerce.

98. **Mining** is the obtaining of useful minerals and metals from the ground. Mines are usually in mountainous countries. The principal minerals and metals dug out of the earth by the miner are coal, salt, gold, silver, iron, copper, and lead.

Iron and coal are the most important minerals, and happily they are widely distributed over the earth. Our country, particularly, abounds in them. It has the largest coal fields in the world, and very rich mines of iron.

99. **Agriculture** is the cultivation of useful plants and the raising of domestic animals. A great many kinds of plants are grown. Each country, however, is not suited to the cultivation of all kinds of plants.

Soil and climate determine what kinds of plants will flourish in a given region.

100. The inhabitants of the torrid zones raise rice, coffee, sugar-cane, bananas, plantains, cotton, dates (which grow on a beautiful kind of palm), the bread-fruit, and a great many delicious fruits.

101. The inhabitants of the temperate zones raise Indian corn, wheat, oats, rye, potatoes, apples, pears, peaches, etc. Cotton is also raised in the warmer portions of the temperate zones, and tea in China and Japan.

In the frigid zones, but few useful plants can be raised. Barley, potatoes, and some other vegetables are cultivated in the warmer parts.

102. **Manufacturing** is that occupation by which the products raised by the farmer, or dug from the earth by the miner, are rendered fit for our use.

Grain raised by the farmer has to be made into flour and bread; the metals have to be separated from the ores taken from the ground by the miner, and are then manufactured into tools, machines, and other articles; cotton and flax must be spun and woven. Thus almost every product of nature undergoes some change before we can use it.

103. **Commerce** is the exchange of goods. Those who carry on this business are called merchants.

Domestic Commerce is the exchange of goods between different parts of the same country.

Foreign Commerce is the exchange of goods between different countries.

Exports are goods which are sent out of a country; *imports*, those which are brought into a country.

Thus, a merchant who buys manufactures in Massachusetts and sells them in Chicago, or who buys flour in Chicago and sells it in Boston, is engaged in domestic commerce.

A merchant exporting cotton to Liverpool, or importing silk goods from France, is engaged in foreign commerce.

104. Goods are transported from one place to another on railroads, canals, and navigable rivers, or across the ocean.

Railroads are a modern invention; the first locomotive was used in 1804, yet the civilized countries of Europe and the United States are already crossed by numerous railroads in every direction, and new lines are being built every year.

Nearly one half of the railroads in the world are within the United States.

Canals are artificial water channels connecting navigable rivers, lakes, or oceans. They are very useful in the transportation of heavy and bulky goods.



A Manufactory.

QUESTIONS.—96. What do we require? What is said of the materials which supply these necessities?—97. Name the four principal occupations.—98. What is mining? Name some useful minerals and metals.—99. What is agriculture?—100. Name some plants raised in the torrid zones.—101. Name some plants raised in the temperate zones. In the frigid zones.—102. What is manufacturing?—103. What is commerce? What is domestic commerce? Foreign commerce? What are exports? Imports?—104. How are goods transported? What can you say of railroads? Of canals?

XV. FORMS OF GOVERNMENT.

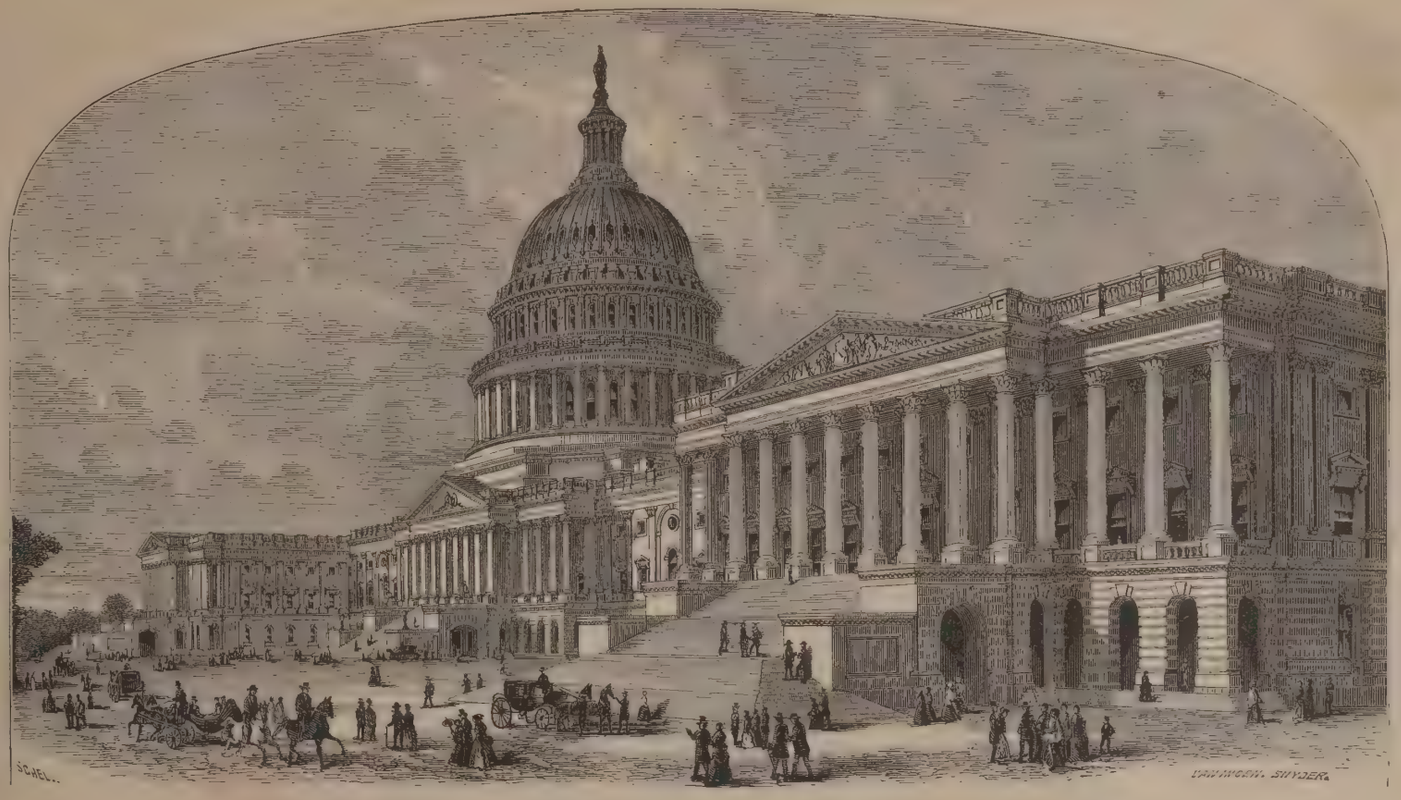
105. A people united under certain rules, or **Laws,** which all are required to obey, forms a **State.**

The **Government** of a state comprises those persons who make the laws, and see that they are obeyed or put in force.

106. There are two kinds, or forms of government: *Republics* and *Monarchies.*

In a **Republic,** the people choose the persons who are entrusted to carry on the government. The persons who make the laws are called *Senators* and *Representatives.*

The person whose duty it is to see that the laws are put in force, is called a *Governor* or *President.* The governor or president is the chief officer of a state.



The Capitol, at Washington.

107. In a **Monarchy**, the people usually choose those who make their laws; but they do not choose their chief officer. His place is filled by a *ruler*, who holds his office by virtue of his birth.

108. There are various kinds of monarchies. Some are *Kingdoms*, which are ruled by a *King;* others are *Empires*, which are ruled by an *Emperor;* and still others are *Duchies* and *Principalities*, which are ruled by *Dukes* and *Princes*.

In some Asiatic monarchies, the chief officer is called a *Caliph* or *Sultan*.

109. The **Capital** of a state is that city in which the chief officer or ruler resides, and where the laws are made.

Washington is the *capital* of the United States. The *capitol* is the building in which the congress of our country meets to make laws.

110. Nearly all the states in Europe and Asia are monarchies; in North and South America they are nearly all republics.

QUESTIONS.—105. What forms a state? What persons does the government of a state comprise?—106. Name the two forms of government. Describe a republic. What are the persons called who make the laws? What is the chief officer called?—107. Describe a monarchy.—108. Name some kinds of monarchies.—109. What city is the capital of a state.—110. What is said of the states of Europe and Asia? Of the states of America?

XVI. RELIGIONS.

111. The **Religions** in which the different nations of the world believe, are divided into two classes.

Those of the first class teach the existence of one God; those of the second class teach that there are many gods.

112. The three religions of the first class are: the Christian, the Jewish, and the Mohammedan.

The **Christian** is the religion of most of the White race in Europe and America. Christians believe that Jesus Christ is the Son of God and the Savior of mankind.

113. The **Jewish** Religion is that of the Jews or Israelites. They believe in one God, but reject Jesus Christ, and believe that the Savior is yet to come.

The **Mohammedan,** or **Islam,** Religion was founded among the Arabs, in Asia, by Mohammed. He taught that Moses and Christ were true prophets, but that he himself was the greatest of all prophets.

The inhabitants of western Asia and northern Africa are Mohammedans.

114. Those religions which teach that there are many gods are called **Pagan** religions. They are very numerous, and differ much from each other.

Many of the pagans make for themselves images of wood and stone, called *Idols*, and pray to them for help and protection.

The majority of the black race in Africa, the brown race of Australia, and a large portion of the yellow race are pagans.

QUESTIONS.—111. Into what two classes are the religions divided?—112. Name the three religions which teach the existence of one God. What is said of the Christian religion?—113. What is said of the Jewish religion? Of the Mohammedan religion?—114. What are the religions called which teach the existence of many gods? What is said of many of the pagans?


PHYSICAL and POLITICAL
MAP OF
NORTH AMERICA.
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
100 200 300 400 500 600 700 800 900 1000
Pennsylvania
40,000 Sq. Mls.
West of Greenwich.
West of Washington.
East of Washington.
H. Chandler, Engraver, Buffalo.

PART II.

THE CONTINENTS.

NORTH AMERICA.

MAP QUESTIONS.—What ocean east of North America? What ocean west? What ocean north? What large bay in the northern part? What strait leads into Hudson Bay? What archipelago in the Arctic Ocean? What waters east of the Arctic Archipelago? What island east of Baffin Bay and Davis Strait? What island east of Greenland?

What large peninsula east of Hudson Bay? What gulf south of Labrador? What island east of the gulf of St. Lawrence? What gulf in the southern part of the grand division? What peninsula east of the Gulf of Mexico? What peninsula south of it? What sea south-east of it? What islands north of the Caribbean Sea?

What isthmus connects North and South America? What gulf and peninsula on the Pacific Ocean? What cape near the 40th parallel on the Pacific coast? What peninsula on the north-west coast of the continent? What islands west of Alaska? What strait separates North America from Asia? What cape projects into Behring Strait? What cape projects into the Arctic Ocean?

What great mountain system in the western part of the grand division? Name some of its chains. What mountains in the eastern part? What low plain or valley between the Apalachian and the Rocky mountains? What plateau north-west of Hudson Bay? What low plain between the Arctic Plateau and the Rocky Mountains?

What river empties into the Arctic Ocean? Name three large lakes which are drained by the Mackenzie. What two rivers from the west empty into Hudson Bay? What lake is drained by the Nelson?

What river empties into the Gulf of St. Lawrence? What five large lakes does the St. Lawrence river drain? What great river empties into the Gulf of Mexico? What is the course of the Mississippi? Name three of its western tributaries. What is its largest eastern tributary?

What river empties into the Gulf of California? Where does the Colorado rise? What river of the United States empties into the Pacific Ocean? Where does the Columbia rise? Name its chief tributary. What river empties into Behring Sea?

What country occupies the middle portion of the grand division? What division occupies the northern part? What division north-west of the Dominion of Canada? What two islands form Danish America?

What division lies south of the United States? What division south-east of Mexico? What is the capital of the United States? Of Canada? Of Mexico?

DESCRIPTION.

I. POSITION.

1. **North America** embraces the northern part of the New World.

The most northern point is *Cape Barrow;* the most southern, *Cape Mariato;* the most eastern, *Cape Charles;* and the most western, *Cape Prince of Wales.*

2. North America is washed on the east by the Atlantic Ocean; on the west by the Pacific; and on the north by the Arctic.

3. The principal **bays** and **peninsulas** are: *Hudson Bay,* west of the peninsula of Labrador; the *Gulf of St. Lawrence,* south of Labrador; the *Gulf of Mexico,* extending from the Atlantic Ocean between the peninsulas of Florida and Yucatan; the *Gulf of California* and the *Peninsula of California,* on the Pacific Coast; the *Peninsula of Alaska,* south of Behring Sea.

4. The principal **islands** are: those of the *Arctic Archipelago,* which lies north of the continent; *Greenland,* which is east of the Arctic Archipelago and separated from it by Baffin Bay and Davis Strait; *Iceland,* east of Greenland and separated from it by Denmark Strait; *Newfoundland,* east of the Gulf of St. Lawrence; and the *West Indies,* which lie south-east of the grand division and embrace two chains,—the *Antilles,* north and east of the Caribbean Sea, and the *Bahama Islands,* north of the Antilles.

II. SURFACE.

5. The western part of the grand division is a vast plateau, traversed by several high mountain chains.

This great system of plateaus and mountains is called the **Cordilleras of North America.**

6. The Cordilleras extend from the Isthmus of Panama to the shores of the Arctic Ocean and Behring Sea. The principal mountain chains belonging to this system are: the *Sierra Madre,* in Mexico; the *Rocky Mountains,* in the United States and British America; and a chain which trends along the Pacific coast.

This last chain is called, in the south, the *Sierra Nevada;* in the middle, the *Cascade Mountains;* and in the north, the *Coast Mountains.*

7. In the eastern part of the grand division are: the *Apalachian Mountain System,* extending from the Gulf of St. Lawrence to

northern Alabama and Georgia; the *Height of Land*, extending east from the sources of the Mississippi through Canada and the *Arctic Plateau*, north-west of Hudson Bay.

8. The lofty chains of the Cordilleras are about 10,000 feet high; the Apalachian Mountains are 3000 feet high.

9. The **Great Low Plain** occupies the central part of the grand division, and extends from the Gulf of Mexico to the Arctic Ocean. The *Height of Land* divides it into two parts: the **Mississippi Valley**, and the **Arctic Plain**.

QUESTIONS.—1. What is the most northern point of North America? The most southern? The most eastern? The most western?—2. Bound North America.—3. Where is Hudson Bay? The Gulf of St. Lawrence? The Gulf of Mexico? What two peninsulas border on this Gulf? Where is the Gulf of California? The peninsula of Alaska?—4. Where is Baffin Land? Greenland? What waters east of Greenland? Where is Iceland? Newfoundland? Where are the West Indies? What two chains do they include?

5. Where are the Cordilleras of North America?—6. Where is the Sierra Madre? Where are the Rocky Mountains? What are the names of the chain trending along the coast?—7. Where are the Apalachian Mountains? Where is the Height of Land? The Arctic Plateau?—8. How high are the chains of the Cordilleras? The Apalachian Mountains?—9. Where is the great low plain? Into what two parts is it divided?

III. RIVERS AND LAKES.

10. The Rocky Mountains form the principal water-shed between the Pacific Ocean on the west, and the Atlantic and Arctic oceans on the east and north-east. There are three great rivers on each side of these mountains: the *Mackenzie*, the *St. Lawrence*, and the *Mississippi* on the eastern side; the *Yukon*, the *Columbia*, and the *Colorado* on the western.



Indian Village on the Yukon.

11. The **Mackenzie** drains *Great Bear Lake, Great Slave Lake, Athabasca Lake*, and many others.

The **St. Lawrence** is the outlet of lakes *Ontario, Erie, Huron, Michigan*, and *Superior*. It empties into the Gulf of St. Lawrence.

The **Mississippi** traverses the Mississippi Valley, and empties into the Gulf of Mexico. The *Missouri* is its largest tributary.

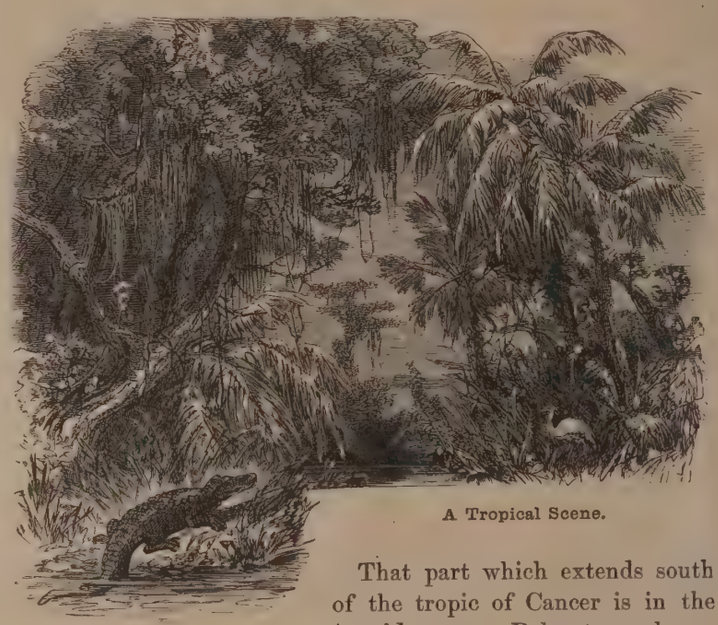
12. The **Yukon** rises in the Rocky Mountains, and empties into Behring Sea.

The **Columbia** rises in the Rocky Mountains, and empties into the Pacific Ocean.

The **Colorado** empties into the Gulf of California. Its upper course is called *Green River*. It rises in the Rocky Mountains.

IV. CLIMATE, VEGETATION, AND ANIMALS.

13. The largest part of North America lies in the **temperate zone**, and is covered with extensive forests and grassy prairies. That part which lies north of the arctic circle is in the **frigid zone**. Mosses and dwarf shrubs are its principal plants. The climate is too cold for trees to grow.



A Tropical Scene.

That part which extends south of the tropic of Cancer is in the **torrid zone**. Palm trees, bananas, and a great variety of other tropical plants grow there in abundance.

14. The principal wild **animals** are: the panther, a ferocious animal of the cat species, the grizzly bear, the polar bear, the musk-ox, the buffalo, and several kinds of deer.

QUESTIONS.—10. What mountains form the principal water-shed of North America? What three rivers east of these mountains? What three rivers west?

11. What lakes does the Mackenzie drain? Into what ocean does the Mackenzie empty? What is its course? What plain does it traverse? Of what five lakes is the St. Lawrence the outlet? Into what gulf does it empty? What is its course? What valley does the Mississippi traverse? Into what gulf does it empty? What is its course? What is its largest tributary?

12. Describe the course of the Yukon. Into what sea does it empty? Where does the Columbia rise? Describe its course. Into what gulf does the Colorado empty? What is the name of its upper course? Where does the Green River rise?

13. In what zone is the largest part of North America? What part is in the frigid zone? What part in the torrid zone? What is said of the vegetation in the torrid zone? In the frigid?—14. Name the principal wild animals.

V. INHABITANTS AND STATES.

15. North America has about 74,000,000 inhabitants. They belong to three races: the American, the Caucasian, and the Ethiopian.

The **American** race, or Indians, formerly occupied the entire grand division; but since the Caucasians came over from Europe, and formed settlements, they have been pushed westward.

The **Caucasians**, or Whites, are by far the most numerous. They consist chiefly of the descendants of English, German, Irish, and Spanish settlers.

The **Ethiopians**, or Negroes, live chiefly in the United States and the West Indies.

16. North America comprises six divisions:

(1) The **United States of America**, occupying the middle part of North America, and the north-western part, called Alaska.

This division contains two thirds of the population of the grand division.

(2) **Dominion of Canada,** lying north of the United States and extending to the Arctic Ocean.

(3) **Danish America**, comprising the islands of Greenland and Iceland.

(4) The **Republic of Mexico**, lying south of the United States and west of the Gulf of Mexico.

(5) The **Republics of Central America**, lying south-east of Mexico, between the Caribbean Sea and the Pacific Ocean.

(6) The **West Indies**, comprising two island chains: the *Antilles*, and the *Bahamas*. The Antilles form a curve extending from the Gulf of Mexico to the east and south. The Bahamas lie south-east of Florida.

QUESTIONS.—15. How many inhabitants has North America? To what three races do they belong? What is said of the Indians? Of the Caucasians? Where do the negroes chiefly live?

16. How many political divisions does North America comprise? Name them. What part of the grand division is occupied by the United States? Where is Alaska? What proportion of the population does the United States contain?

Where is the Dominion of Canada? What two islands are comprised in Danish America? Where is Mexico? Where are the republics of Central America? What two island chains are comprised in the West Indies? Where are the Antilles? Where are the Bahamas?

MAP DRAWING.

RULES FOR DRAWING MAPS FROM MEMORY.

To the Teacher.

1. The pupil should be furnished with a flat ruler, 1½ inches wide, and a lead pencil and paper, or a slate and pencil.

Let him draw a number of parallel *horizontal* lines, at a distance from each other equal to the width of the ruler.

Let him also draw across and at right-angles with these a number of parallel *vertical* lines, at the same distance from each other as the horizontal lines. Thus, the pupil constructs a number of *equal squares.*

2. Teach him to find the center of a square by the intersection of the two diagonals. Teach him to *bisect* one side of a square by drawing a diagonal through two adjoining squares.

Teach him to find a third of one side by drawing a diagonal through three adjoining squares. By drawing a diagonal through four, five, or six adjoining squares, the pupil will easily find the fourth, the fifth, or the sixth of one side of a square.

3. The side of a square affords a rough scale, by the aid of which the pupil may estimate distances and dimensions.

4. The sketches given at the end of each chapter are accompanied with the necessary explanations and directions.

When the pupil has constructed the squares for a map, he will have no difficulty in locating the prominent points. Connecting these points by straight lines, he will obtain the *fundamental figure* of the region to be represented on the map.

5. The pupil should then draw the coast and boundary lines, the principal rivers and mountains, and locate the chief cities and towns.

In drawing a map for the first time, the pupil should consult a printed one. He will soon be able to construct his map from memory.

MAP OF NORTH AMERICA.

1. Draw five vertical and five horizontal lines, as in the annexed figure. You thus obtain a large square divided into sixteen small squares.

2. Point A is Cape Prince of Wales. It is found by dividing the side of the square into thirds.

Point B is Cape Charles. It lies in the center of the side of a square. Point C is Cape Sable, the south-western extremity of Florida.

Cape Mariato lies east of Point D. Points E and F are in the centers of the sides of a square. Point F is Cape St. Lucas, the southern extremity of the peninsula of California.

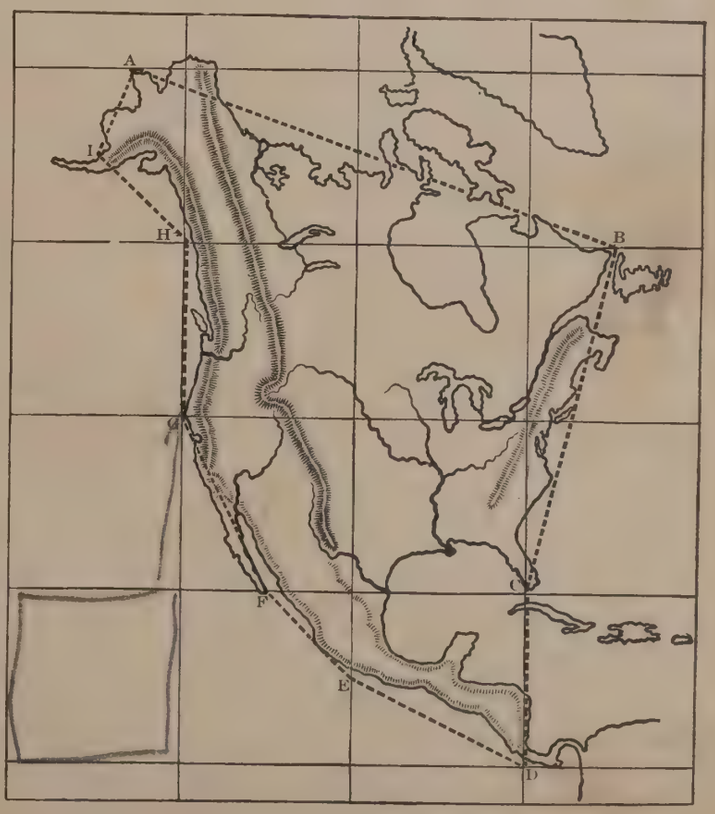
Point G marks the location of Cape Mendocino. Point I is in the center of a square. The peninsula of Alaska extends west of it.

3. Connect these points by straight lines, and you obtain the fundamental figure of North America.

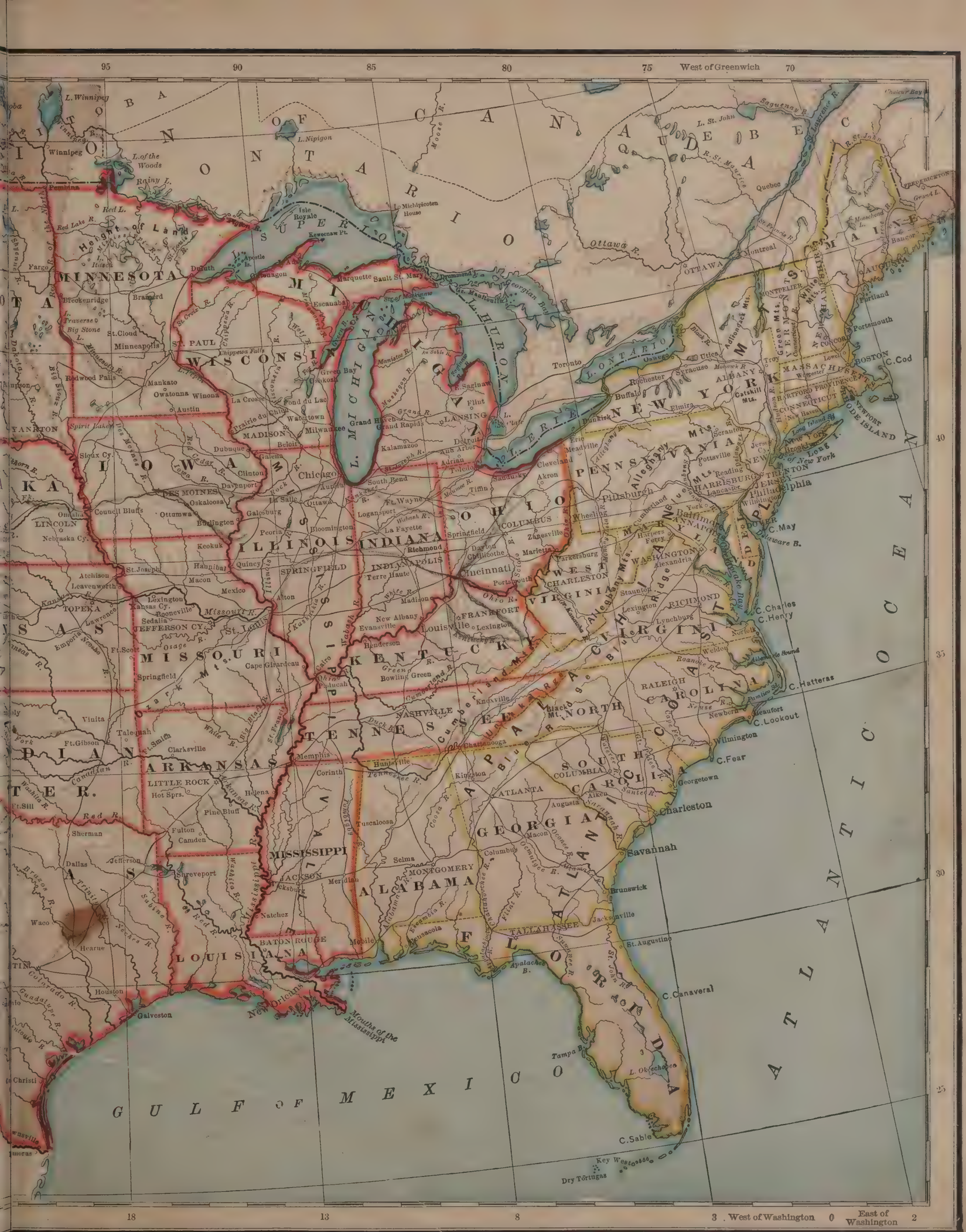
4. Draw the coast line, then the rivers, and at last the mountain chains. Locate the principal cities.

5. Letter the map. The names of cities and capes should be written horizontally; the names of rivers, mountain chains, lakes, and bays should be written close to the object and along its direction, as you see it done in the printed maps of this book.

6. The side of a square is nearly equal to 1200 miles.




PHYSICAL and POLITICAL
MAP OF THE
UNITED STATES
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
100 75 50 25 0 100 200
1000 Sq. Miles.
MAP OF
ALASKA.
0 100 200 300
Scale of Statute Miles.
PACIFIC OCEAN
ATLANTIC OCEAN
BRITISH COLUMBIA
NORTHWEST TERRITORY
WASHINGTON
OREGON
CALIFORNIA
IDAHO
MONTANA
WYOMING
NEVADA
UTAH
COLORADO
ARIZONA
NEW MEXICO
DAKOTA
NEBRASKA
KANSAS
TEXAS
MEXICO
Mt. Baker
Mt. Olympus
C. Flattery
C. Disappointment
Mt. Rainier
Mt. St. Helens
Mt. Adams
Mt. Hood
C. Blanco
C. Mendocino
Pt. Arenas
Pt. Conception
Mt. Shasta
Diamond Pk.
Blue Mts.
Steen Snow Mts.
Warners Rge.
Sierra Nevada Mts.
Coast Ranges
Cascade Mts.
Great Basin
Salmon River Mts.
Wahsatch Mts.
Uintah Mts.
Park Rge.
Sawatch Rge.
Wind River Mts.
Big Horn Mts.
Black Hills
Fremonts Pk.
Uncompahgre Pk.
Mt. Wilson
Pikes Pk.
Longs Pk.
Mogollon Mts.
Zuni Mts.
Sierra Madre
Llano Estacado or Staked Plain
Gulf of California
Gr. Plains of the Columbia
Gr. Basin
Gr. Canon
Rocky Mts.
Alaska Pen.
Alaska Range
Aleutian Islands
BERING SEA
Mt. Wrangell
Mt. St. Elias
Mt. Falrweather
Mt. Crillon
Yukon Mts.
Romanzoff Mts.
Kotzebue Sd.
Behring Sd.
Norton Sd.
Prince of Wales Sd.
Dixon Sd.
Queen Charlotte I.
Kadiak I.
Unalaska I.
Nunivak I.
St. Matthew I.
St. Lawrence I.
St. Paul
St. George
Pribyloff Is.
Pt. Hope
C. Lisburne
C. Barrow
C. Prince of Wales
East C.
PARA of SIBERIA
Arctic Ocean
Portland
Salem
Olympia
Boise Cy.
Salt Lake Cy.
Carson Cy.
Virginia Cy.
Sacramento
San Francisco
Los Angeles
San Diego
Santa Barbara Is.
Prescott
Tucson
Santa Fe
Albuquerque
Denver
Cheyenne
Ogden
Evanston
Helena
Gallatin
Ft. Union
Ft. Buford
Bismarck
Ft. Rice
Ft. Sully
Ft. Pierre
Ft. Randall
Ft. Aubrey
Ft. Dodge
Ft. Leavenworth
Ft. Kearney
Ft. Laramie
Ft. Hall
Ft. Boise
Ft. Vancouver
Ft. Yukon
Ft. Good Hope
Ft. Selkirk
Ft. Simpson
Ft. Wrangell
Ft. Yukon
Pueblo
Trinidad
Amarillo
Mesilla
Dona Ana
El Paso del Norte
San Elizario
Albuquerque
Yellow Stone L.
Great Salt L.
Humboldt L.
Pyramid L.
Tulare L.
Mono L.
Owens L.
Winnipeg L.
Athabasca L.
Great Bear L.
Great Slave L.
Great Fish R.
Mackenzie R.
Yukon R.
Columbia R.
Snake R.
Missouri R.
Red R.
Rio Grande
Colorado R.
Gila R.
Pecos R.
Canadian R.
Arkansas R.
Platte R.
Yellow Stone R.
Big Horn R.
Powder R.
Tongue R.
Milk R.
Heart R.
Little Missouri R.
Niobrara R.
Republican R.
Smoky Hill Fork
Kit Carson
Sheridan
Solomon R.
Saline R.
Neuces R.
Brazos R.
Trinity R.
Sabine R.
Matthews


95
90
85
80
75
West of Greenwich
70
L. Winnipeg
Winnipeg
L. of the Woods
Rainy L.
L. Nipigon
Moose R.
Saguenay R.
L. St. John
Quebec
Lawrence R.
R. St. Maurice
R. St. John
Fredericton
Grand L.
Red L.
Red Lake R.
Height of Land
Isle Royale
Kewenaw Pt.
L. Michipicoten
House
Ottawa R.
Montreal
OTTAWA
Bangor
AUGUSTA
Portland
Portsmouth
CONCORD
Fargo
Duluth
Apostle Is.
Chequamegon
Marquette
Sault St. Marie
Drummond I.
Gr. Manitoulin I.
Georgian Bay
Brainerd
Escanaba
Traverse
Big Stone L.
St. Cloud
Minneapolis
ST. PAUL
Chippewa Falls
Green Bay
Oshkosh
Manistee R.
Au Sable R.
Saginaw
Flint
Toronto
Oswego
Utica
Rochester
Syracuse
Mohawk R.
Troy
Lowell
Worcester
BOSTON
C. Cod
Redwood Falls
Mankato
Owatonna
Winona
La Crosse
Fond du Lac
Watertown
Milwaukee
Grand Haven
Grand Rapids
LANSING
Kalamazoo
Detroit
Buffalo
Elmira
Albany
Catskill Mts.
Hartford
Providence
Newport
RHODE ISLAND
Austin
Prairie du Chien
MADISON
Dubuque
Beloit
Ann Arbor
Erie
Meadville
Scranton
Jersey City
New York
Long Island
Sioux Cy.
Galena
Clinton
Davenport
Chicago
South Bend
Adrian
Toledo
Cleveland
Akron
Pittsburgh
Reading
Lancaster
TRENTON
Philadelphia
Wilmington
DOVER
Omaha
Council Bluffs
Oskaloosa
DES MOINES
Ottumwa
Burlington
Galesburg
Aurora
Ottawa
Ft. Wayne
Logansport
Tiffin
Sandusky
Akron
Wheeling
Harpers Ferry
Baltimore
ANNAPOLIS
C. May
Delaware B.
LINCOLN
Nebraska Cy.
Keokuk
Peoria
Bloomington
La Fayette
Springfield
COLUMBUS
Zanesville
Dayton
Chillicothe
Marietta
Parkersburg
Alexandria
WASHINGTON
Atchison
St. Joseph
Hannibal
Quincy
SPRINGFIELD
Macon
Terre Haute
INDIANAPOLIS
Richmond
Cincinnati
Portsmouth
CHARLESTON
Staunton
RICHMOND
C. Charles
C. Henry
TOPEKA
Lexington
Kansas Cy.
Mexico
Alton
Madison
Ohio R.
FRANKFORT
Lexington
Lynchburg
Norfolk
Lawrence
Sedalia
Rooneville
JEFFERSON CY.
St. Louis
New Albany
Evansville
Henderson
Louisville
Albemarle Sound
Ft. Scott
Osage
Springfield
Cape Girardeau
Ohio R.
Paducah
Green R.
Bowling Green
Roanoke R.
Weldon
C. Hatteras
Vinita
Ft. Gibson
Tahlequah
Clarksville
Memphis
White R.
Big Black R.
St. Francis R.
Duck R.
Tennessee R.
Huntsville
Corinth
Knoxville
Chattanooga
Cumberland Mts.
Black Mt.
RALEIGH
Newbern
Beaufort
C. Lookout
Wilmington
LITTLE ROCK
Hot Sprs.
Helena
Pine Bluff
Red R.
Kingston
COLUMBIA
Augusta
Aiken
Georgetown
C. Fear
Charleston
Sherman
Fulton
Camden
Tuscaloosa
ATLANTA
Macon
Savannah
Dallas
Jefferson
Shreveport
Meridian
JACKSON
Vicksburg
Selma
MONTGOMERY
Columbus
Brunswick
Waco
Natchez
Hearne
BATON ROUGE
Mobile
Pensacola
TALLAHASSEE
Jacksonville
St. Augustine
Houston
Galveston
New Orleans
Mouths of the Mississippi
Apalachee B.
C. Canaveral
Tampa B.
L. Okeechobee
Christi
C. Sable
Key Westonsdde
Dry Tortugas
GULF OF MEXICO
ATLANTIC OCEAN
18
13
8
3
West of Washington
0
East of Washington
2

THE UNITED STATES.

(*The* MAP QUESTIONS *on page 23 should be studied before the* DESCRIPTION.)

DESCRIPTION.

I. POSITION AND OUTLINE.

1. The **United States** occupies the central portion of North America, between the parallels of 25° and 49° north latitude, and extends from the Atlantic to the Pacific Ocean.

2. The **northern boundary** is formed mainly by the parallel of 49°, the Great Lakes, and the St. Lawrence River.

3. The Atlantic Ocean washes the **eastern shore** of the country. This shore describes three curves. The first reaches from the most eastern corner of Maine to Cape Cod; the second, from Cape Cod to Cape Hatteras; and the third, from Cape Hatteras to Florida.

The second curve is broken by the principal indentations of the Atlantic coast, which are New York, Delaware, and Chesapeake bays.

4. The **southern boundary** is formed by the Gulf of Mexico, the Rio Grande, and a broken line from the Rio Grande to the Pacific Ocean.

5. The **western shore** is washed by the Pacific Ocean. It is indented by Puget Sound in the north, and the Bay of San Francisco in California. Cape Flattery is the most western point of the country.

6. The **area** of the United States, including Alaska, is three and a half million square miles.

This immense area is surpassed by that of only three great states,—the British, Chinese, and Russian empires.

II. SURFACE.

7. The United States comprises three great **natural divisions:** (1) The Apalachian mountain system with the Atlantic coast plain, (2) the widest and most elevated portion of the Cordilleras (see map of North America), and (3) the Mississippi Valley with the Great Plains.

8. The **Apalachian** mountain system extends from the coast of the Gulf of St. Lawrence to northern Georgia and Alabama. It consists of a large number of nearly parallel chains, inclosing beautiful and fertile valleys. The most important of these chains are: the *White Mountains* and *Green Mountains* in New England, the *Adirondack Mountains* in New York, and the *Blue Ridge* and *Alleghany Mountains* in the south.

The *Atlantic Coast Plain* lies east of the Apalachian system. It varies from fifty miles to three hundred miles in width.

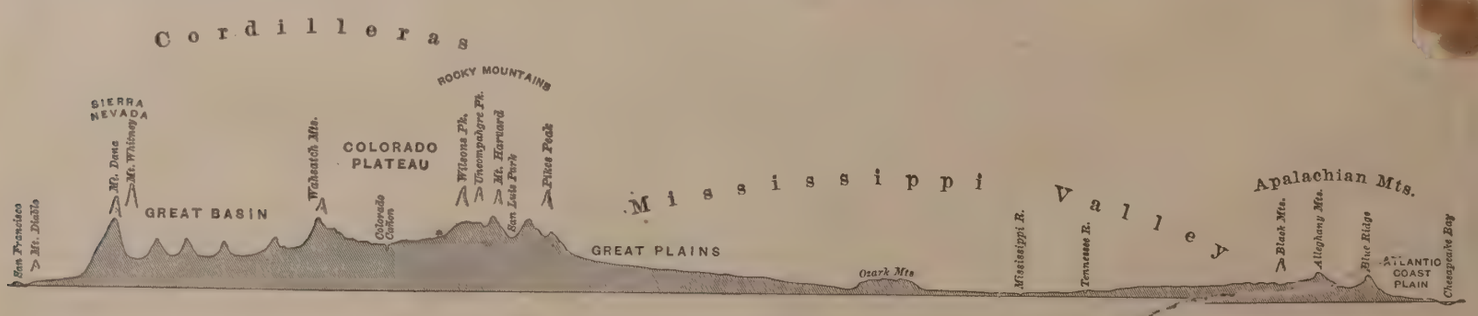
9. That portion of the **Cordilleras** which is included within the United States consists of vast plateaus and many lofty mountain chains. The most important of these are the *Rocky Mountains* and the chain near the Pacific Ocean, known in California as the *Sierra Nevada*, and in Oregon and Washington Territory as the *Cascade Mountains*.

The arid plateau, which is inclosed between the Rocky Mountains and the Sierra Nevada, is divided by the *Wahsatch Mountains* into two parts: the *Plateau of the Colorado* in the east, and the *Great Basin* in the west.

The principal ranges of the Cordilleras are about 10,000 feet above the sea, and their highest peaks exceed 14,000 feet. The Apalachian chains are about 3,000 feet high, and but few of their peaks exceed 6,000 feet.

10. The **Mississippi Valley,** through which the Mississippi River flows from north to south, extends between the Apalachian and Rocky mountains. Nearly the whole eastern half of it is a low plain of unsurpassed fertility; the western half, known as the *Great Plains*, forms an arid table-land, gradually rising from the low plain until it attains a height of over five thousand feet along the eastern base of the Rocky Mountains.

A profile of our country, from the Atlantic to the Pacific Ocean, is represented in the annexed figure. The shaded portion shows a section of the plains, plateaus, and mountains which we have to cross in traveling along the parallel of 38°. The detached peaks are those which stand at some distance from this line.



QUESTIONS.—1. What part of North America does our country occupy?—2. Describe the northern boundary.—3. The eastern shore with its three curves.—4. The southern boundary.—5. The western shore. Where is the Bay of San Francisco? What cape is the most western point of our country?—6. What is the area of the United States, including Alaska?

7. Name the three natural divisions of the country.—8. What is said of the Apalachian mountain system? Name the most important chains. Where is the Atlantic Coast Plain?—9. What is said of the Cordilleras in the United States? What is said of the Wahsatch Mountains?—10. What is said of the Mississippi Valley? Where are the Great Plains?

MAP QUESTIONS.

To precede the Description on page 22.—What country bounds the United States on the north? On the south? What ocean on the east? On the west? Name four large lakes on the northern boundary. What river forms part of the southern boundary? What gulf?

What peninsula is in the south-east? What cape is the southern extremity of Florida? Name two capes on the Atlantic coast. What bays between Cape Cod and Cape Hatteras? Name two capes on the Pacific coast. What bay on the Pacific coast?

What mountains in the eastern part of the United States? In what direction do they trend? Name two chains in the northern part of the Apalachian system. In the southern part. What mountain chain forms the water-shed between the rivers flowing into the Pacific Ocean and the western tributaries of the Mississippi? What great mountain chains near the Pacific?

Name the principal chain between the Rocky Mountains and the Sierra Nevada. What table-land between the Wahsatch and the Rocky mountains? What table-land between the Wahsatch Mountains and the Sierra Nevada? What table-land east of the Rocky Mountains? What low plain between the Great Plains and the Apalachian Mountains? What one east of the Apalachian Mountains?

What river empties into Long Island Sound? Into the Bay of New York? What two rivers empty into Chesapeake Bay? Name four rivers which empty into the ocean between Cape Hatteras and Florida. Describe the course of the Mississippi River. Where does it rise? Into what gulf does it empty? Name its largest eastern tributary. Its largest western tributary. Name two southern tributaries of the Ohio. Name some western tributaries of the Missouri. Name two western tributaries of the Mississippi south of the Missouri.

Describe the course of the Rio Grande. What rivers empty into the Gulf of Mexico between the Mississippi and the Rio Grande? What river empties into the Gulf of California? Describe the course of the Colorado. What large river drains the north-western part of the United States? Name the largest tributary of the Columbia. What two rivers empty into the Bay of San Francisco? Describe the course of the Sacramento. Of the San Joaquin. What river in the Great Basin? What is the course of the Humboldt River? What large lake west of the Wahsatch Mountains?

What states border on the Atlantic Ocean? What states on the Gulf of Mexico? What states and territory on the Pacific Ocean? What states on the Mississippi River? On the Great Lakes? Through what states do the Apalachian Mountains extend? In what state and territories are the Rocky Mountains? What state includes the Sierra Nevada? What state and territory include the Cascade Mountains?

What ocean washes the northern shore of Alaska? What sea the western? What ocean the southern? What cape is the most northern point of Alaska? What cape the most western? On what strait is Cape Prince of Wales? From what continent does Behring Strait separate Alaska? What peninsula in the south-west? What chain of islands extends west of the peninsula of Alaska? What large river flows through Alaska? Name two high mountains near the Pacific coast.

III. RIVERS AND LAKES.

11. The largest river system is that of the **Mississippi,** which, with its numerous tributaries, drains more than one third of the area of the United States. The Mississippi issues from Lake Itasca in Minnesota, flows south, and empties into the Gulf of Mexico. Its principal western tributaries are, the *Missouri,* the *Arkansas,* and the *Red* rivers.

The **Missouri** is much longer than the Mississippi to their junction: it receives the *Yellowstone, Platte,* and *Kansas* rivers. The largest eastern tributary of the Mississippi is the *Ohio River,* which is formed by the *Monongahela* and *Alleghany* rivers.

12. The Atlantic coast plain is drained by many large streams, which are navigable for a considerable distance from the coast: among these are the *Hudson, Delaware, Potomac, Savannah,* and *St. John* rivers.

The *St. Lawrence River,* which forms part of the northern boundary, is the outlet of the **Great Lakes,**—Ontario, Erie, Huron, Michigan, and Superior.

13. The two largest rivers west of the Rocky Mountains are the *Colorado* and *Columbia.* The Colorado is formed by the junction of *Green* and *Grand* rivers, and empties into the Gulf of California. The Columbia rises in the Rocky Mountains of British Columbia: with its large tributaries, it drains the region between the Rocky and Cascade mountains, and empties into the Pacific Ocean.

The streams and lakes of the Great Basin have no outlet into the sea. *Great Salt Lake* lies near the base of the Wahsatch Mountains.

IV. CLIMATE AND VEGETATION.

14. The **climate** of the United States is temperate. The summers are warm throughout, except on the most elevated mountains and table-lands; the winters are mild in the south, but cold in the north.

15. The eastern half of the country, from the Atlantic to the Great Plains, receives an abundant supply of **moisture** (rain and snow), and, having a very fertile soil, it supports a rich and varied vegetation. It is an agricultural region of surpassing productiveness.

16. The Great Plains and the Cordilleras, except a narrow belt of country along the Pacific coast, where the rain-fall is quite heavy, have a **dry climate.** The sage-bush and cactus cover most of the elevated table-land.

Questions.—11. Which is the largest river system of our country? From what lake does the Mississippi issue? What is its course? Describe the Missouri. What tributaries does it receive? Describe the Ohio. What two rivers form it?—12. By what rivers is the Atlantic coast plain drained? Describe the St. Lawrence. Of what lakes is it the outlet?—13. Describe the Colorado River. The Columbia. What is said of the streams and lakes of the Great Basin? Where is Great Salt Lake?

14. What is said of the climate of the United States? 15. What portion of the country has a moist climate?—16. What portion has a dry climate?

V. INHABITANTS AND OCCUPATIONS.

17. The **inhabitants** of the United States number more than 50,000,000, of whom over 43,000,000 are whites, or *Caucasians.* These are chiefly of English, German, and Irish descent, and



View on the Coast of Maine.

occupy the eastern part of the country. Only about 1,400,000 whites live west of the Rocky Mountains.

The number of *negroes* is about 6,500,000. The *Indians* live almost exclusively west of the Mississippi. The *Mongolian* race is represented by Chinese, who have of late years emigrated to California.

18. **Occupations.**—The principal branch of industry is **agriculture,** which is carried on from the Atlantic coast to the Great Plains, and in the valleys near the Pacific coast. The products are: *cotton, sugar, tobacco, hay,* and *hemp.* The following food plants are cultivated: *Indian corn, wheat, oats, rice, potatoes.*

The raising of cattle, horses, hogs, and sheep is very largely carried on in the entire agricultural region.

19. **Manufacturing** is an important industry in the states north of the Ohio and Potomac rivers. The articles produced are: cotton goods, woolen goods, leather, boots and shoes, clothing, machinery, flour, paper, books, furniture, etc.

20. In **mining** products, our country excels all others. The mountains of the Cordilleras yield immense quantities of gold and silver. Iron, coal, and petroleum are very abundant, chiefly in Pennsylvania. Copper, lead, zinc, and salt are mined in various parts of the country.

21. The **foreign commerce** is mostly carried on with western Europe, South America, the West Indies, and China. It centers in the following sea-ports: New York, Boston, Baltimore, Philadelphia, New Orleans, Mobile, and San Francisco.

The exports to foreign countries are cotton, flour, pork, gold, petroleum, and manufactures. The imports from foreign countries are: dry goods, silks, leather, and other manufactures from Europe; hides, sugar, and coffee from South America and the West Indies; and tea from China.

22. There is a very large **domestic commerce** between different parts of our country, which is greatly facilitated by railroads and navigable streams. Its principal inland centers are St. Louis, Chicago, and Cincinnati.

23. The **railroads** of the United States have a total length greater than that of all the European railroads together. Few cities of any importance are without a railroad. The principal routes connect the great sea-ports with the inland cities.

24. The combined length of **navigable rivers** is estimated at 50,000 miles. The Mississippi, with its tributaries, forms one of the most magnificent systems of water-ways on the globe.

A steamboat may go from New Orleans to St. Louis, and thence by the upper Mississippi to St. Paul, or by the Missouri, through Dakota and Montana, to the base of the Rocky Mountains, or by the Ohio river to Pittsburgh.

25. The most important water-way of the country, which connects the great central region with a sea-port on the Atlantic coast, is by the *Great Lakes,* the *Erie Canal* from Buffalo to Albany, and thence by the *Hudson River* to New York.

QUESTIONS.—17. What is the number of inhabitants in the United States? How many of them are whites?—18. What is the principal branch of industry? Name the agricultural products.—19. Name some manufactured articles.—20. Name the mining products.—21. With what countries is the foreign commerce carried on? In what sea-ports does it center? Name the principal exports. Imports.—22. Name the principal centers of our domestic commerce.—23. What is said of our railroads?—24. What is the estimated length of navigable rivers?—25. What water-way connects New York with the central region of the country?

VI. GOVERNMENT AND STATES.

26. The **government** is republican in form. The people elect those persons who form our *Congress* and make our laws. Congress consists of a Senate and a House of Representatives.

The *President* is the executive officer, or chief magistrate. He is elected by the people for a term of four years. The *Supreme Court* is the highest judicial tribunal.

27. **Washington,** in the *District of Columbia,* on the northern shore of the Potomac River, is the capital.

Congress assembles here once a year. The Supreme Court also holds its sessions in Washington.

28. The United States consists of 38 states, 8 territories, the District of Columbia, Alaska, and the Indian Territory.

The chief magistrate of a state or territory is called *Governor*.

The governor of a state is elected by the people; the governor of a territory is appointed by the President. The members of Congress from a state have the right to vote; the delegates from a territory may participate in debate, but can not vote. Alaska and Indian Territory are not organized, and have no delegates in Congress.

29. The states and territories may be conveniently classed under the following three groups, each of which includes one of the great physical regions of our country:

(1) The **Eastern, or Atlantic States,** include the Atlantic coast plain and the Apalachian Mountains. They comprise three sections:

(1) New England States:	(2) Middle States:	(3) South-eastern States:
1. Maine,	1. New York,	1. North Carolina,
2. New Hampshire,	2. Pennsylvania,	2. South Carolina,
3. Vermont,	3. New Jersey,	3. Georgia,
4. Massachusetts,	4. Delaware,	4. Alabama,
5. Rhode Island,	5. Maryland,	5. Florida.
6. Connecticut.	6. Virginia,	
	7. West Virginia,	
	District of Columbia.	

(2) The **Central States** occupy the Mississippi Valley:

(1) North Central States, East of the Mississippi.	(2) North Central States, West of the Mississippi.	(3) South Central States.
1. Ohio,	1. Missouri,	1. Tennessee,
2. Indiana,	2. Iowa,	2. Mississippi,
3. Illinois,	3. Minnesota,	3. Louisiana,
4. Michigan,	4. Nebraska,	4. Arkansas,
5. Wisconsin,	5. Kansas,	5. Texas,
6. Kentucky.	Dakota Territory.	Indian Territory.

(3) The **Western States** and **Territories** occupy the region of the Cordilleras:

(1) Rocky Mountain States.	(2) Plateau States.	(3) Pacific States.
1. Colorado,	1. Nevada,	1. California,
New Mexico Territory,	Idaho Territory,	2. Oregon,
Montana Ter.,	Utah Ter.,	Washington Territory,
Wyoming Ter.	Arizona Ter.	Alaska.

30. **Alaska** occupies the north-western part of America, and was purchased from Russia in 1867. It is a cold, barren, mountainous region, inhabited chiefly by Indians and Esquimaux. Furs of seal, otter, beaver, etc., are almost the only product.

QUESTIONS.—26. What is the form of government? Of what does Congress consist? What is said of the President? Of the Supreme Court?—27. What is the capital of the United States?—28. What are the political divisions of the United States?—29. Name the three groups of States. What physical regions do the Eastern states include? What region the Central states? The Western? Name the three sections of each group. The states within each section.—30. What is said of Alaska?

MAP DRAWING.

MAP OF THE UNITED STATES.

1. Draw five horizontal and seven vertical lines, as in the annexed figure. You thus obtain a rectangle divided into twenty-four squares.

2. Point A is near the north-western corner of the United States. To find it, divide the side of the square into four parts. Point B is north-west of Lake Superior. It is in the center of a square.

3. To find point C, divide the side of the square into four parts. It is near the southern shore of Lake Ontario. Point D is the right upper corner of the map.

4. Point E lies east of Tampa Bay, in Florida. To find it, trisect the side of the square. Point F lies north-west of the Gulf of Mexico.

5. Point G lies in the center of the side of a square. It marks the mouth of the Rio Grande. Points H and I lie in the centers of the sides of their squares.

6. Connect these points by straight lines. The figure thus obtained marks roughly the shape of the United States. Draw from A to B the curved line which marks the northern boundary. Draw the Great Lakes between B and C. Draw the St. Lawrence, and the boundary from this river to the Bay of Fundy.

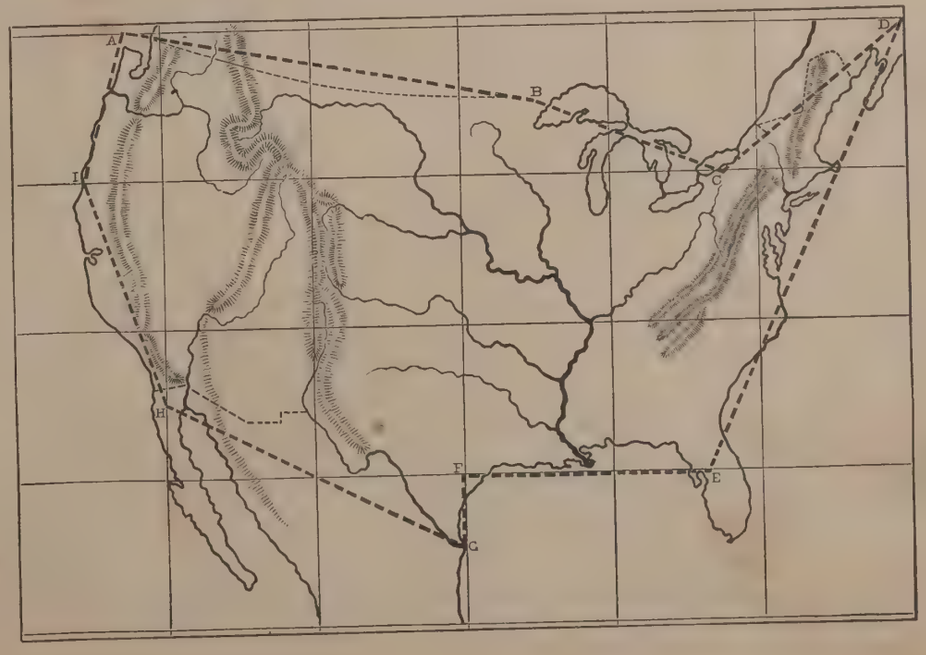
7. The line D E marks the direction of the eastern coast. Cape Cod lies in this line, and Cape Hatteras a little east of it, and both lie on the sides of a square.

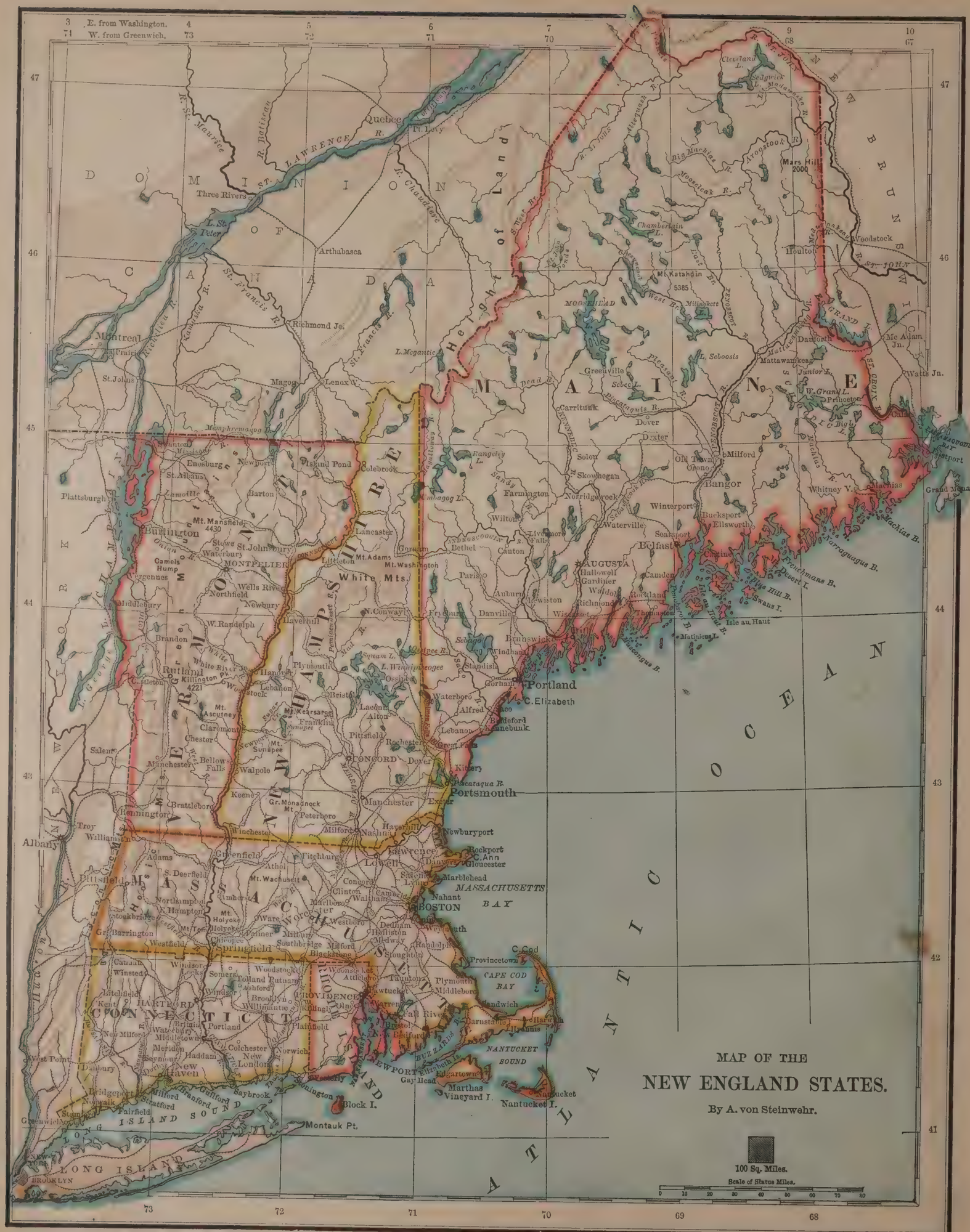
8. Draw the coast near the line D E. Draw the peninsula of Florida south of E. Draw the coast of the Gulf of Mexico. Draw the Rio Grande, and the boundary west of it.

9. Draw the coast of the Pacific Ocean. It forms a curve west of the line H I, and then follows very closely the line I A.

10. Draw the rivers, lakes, and mountains, locate the principal cities, and letter the map.

11. The side of one square in this map is about 520 miles. From Cape Cod to the western coast is a little more than five times the side of a square, or about 2600 miles. From the northern boundary to the mouth of the Rio Grande is nearly three times the side of a square, or about 1600 miles.




MAP OF THE
NEW ENGLAND STATES.
By A. von Steinwehr.
100 Sq. Miles.
Scale of Statute Miles.
0 10 20 30 40 50 60 70 80
DOMINION OF CANADA
MAINE
NEW HAMPSHIRE
VERMONT
MASSACHUSETTS
RHODE ISLAND
CONNECTICUT
NEW BRUNSWICK
ATLANTIC OCEAN
MASSACHUSETTS BAY
CAPE COD BAY
NANTUCKET SOUND
LONG ISLAND SOUND
LONG ISLAND
Quebec
Montreal
Portland
BOSTON
Portsmouth
Bangor
Augusta
Concord
Montpelier
Burlington
Albany
Hartford
Providence
Newport
Worcester
Springfield
New Haven
Lowell
Lawrence
Manchester
Nashua
Lewiston
Auburn
Waterville
Augusta
Belfast
Rockland
Calais
St. John
Fredericton
Woodstock
Houlton
Mars Hill
Presque Isle
Caribou
Fort Kent
Madawaska
Edmundston
Grand Falls
Three Rivers
Arthabasca
Richmond Jc.
Megantic
Lenoxville
Magog
St. Johns
Plattsburgh
Rouses Point
Swanton
Enosburg
Newport
Island Pond
Colebrook
St. Albans
Barton
Lancaster
Stowe
St. Johnsbury
Waterbury
Camels Hump
Mt. Mansfield 4430
Mt. Adams
Mt. Washington
White Mts.
Littleton
Gorham
Bethel
Canton
Wilton
Farmington
Norridgewock
Skowhegan
Solon
Dover
Dexter
Old Town
Orono
Milford
Winterport
Bucksport
Ellsworth
Seal Harbor
Castine
Deer Isle
Stonington
Isle au Haut
Matinicus I.
Swans I.
Desert I.
Mt. Desert I.
Frenchmans B.
Narraguagus B.
Machias B.
Machias
Whitneyville
Jonesport
Grand Manan
Eastport
Passamaquoddy Bay
Calais
Princeton
Danforth
Mattawamkeag
Mt. Katahdin 5385
Moosehead L.
Chamberlain L.
Millinocket
Lincoln
Woodstock
Houlton
Mars Hill 2000
Presque Isle
Caribou
Fort Kent
Madawaska
Edmundston
Grand Falls
Clearland L.
Sedgwick
Lake Madawaska
Big Machias R.
Aroostook R.
Moosehead R.
Chamberlain L.
Allagash R.
St. John R.
St. Francis R.
St. Maurice R.
Batiscan R.
Chaudiere R.
Kennebec R.
Penobscot R.
Androscoggin R.
Sandy R.
Carrabassett R.
Dead R.
Piscataquis R.
Pleasant R.
Sebec L.
Seboomook L.
Moose Head L.
Rangeley L.
Umbagog L.
Memphremagog L.
Connecticut R.
Merrimack R.
Pemigewasset R.
Winnipesaukee
Squam L.
Newfound L.
Ossipee R.
Saco R.
Androscoggin R.
Kennebec R.
Sebago
Brunswick
Bath
Gardiner
Hallowell
Waldoboro
Rockland
Thomaston
Camden
Penobscot R.
Isle au Haut
Matinicus I.
Swans

THE NEW ENGLAND STATES.

MAP QUESTIONS.—What political division bounds the New England States on the north and east? What state on the west? What ocean washes their shores? Name three bays on the coast of Massachusetts. Name a bay in Rhode Island. On what sound does Connecticut border?

What mountain chain traverses Vermont? In what direction do the Green Mountains trend? Name two mountain chains in western Massachusetts. What river flows east of the Green and the Hoosac Mountains? What mountains east of the Connecticut? Name a peak of the White Mountains.

What river on the northern boundary of Maine? What river on the eastern boundary? Of what lakes is the St. Croix the outlet? Name the three largest rivers of Maine. Of what lake is the Kennebec the outlet? What lake in southern Maine? What river separates New Hampshire and Vermont? What is the course of the Connecticut? Into what sound does it empty?

What river flows through New Hampshire? What lake is drained by the Merrimac? What river flows through western Massachusetts and Connecticut? Between what mountain ranges is the upper Housatonic?

Name the three northern New England States. What state extends farthest north? Name the three southern New England States. Which of the six states is the largest? Which is the smallest?

Bound Maine. What is its capital? On what river is it situated? What city on the Penobscot? What city on Casco Bay?

Bound New Hampshire. What is its capital? On what river is it situated? Name two other towns on the Merrimac, south of Concord. Name a sea-port in New Hampshire.

Bound Vermont. What is its capital? On what river is it situated? What city on Lake Champlain?

Bound Massachusetts. What is its capital? Where is it situated? What city on the Merrimac? What city about midway between Boston and the Connecticut? Name some towns on the Connecticut. Name a city in the Housatonic Valley.

Bound Rhode Island. Name its two capitals. Where is Newport? Providence?

Bound Connecticut. Name its capital. Where is Hartford? New Haven?

DESCRIPTION.

I. POSITION.

1. The **New England States** form the most north-eastern section of our country. They extend from the Atlantic Ocean to the valley of the Hudson River and Lake Champlain.

2. Maine is nearly as large as the five others together, yet its area is but two thirds that of New York or Pennsylvania.

II. SURFACE.

3. New England includes the northern part of the Apalachian system. Its surface is exceedingly rough and broken.

4. A long chain traverses the western part of New England, between the valleys of the Connecticut and the Hudson. In Vermont, it is called the *Green Mountains.* In Massachusetts, it consists of two nearly parallel ranges, the *Hoosac* and the *Taconic Mountains.* Between these ranges is the valley of the Housatonic River.

5. There is a series of detached elevations east of the Connecticut River. The highest of these are the *White Mountains,* in New Hampshire. Their loftiest peak, *Mount Washington,* exceeds 6000 feet in height.

The Atlantic coast plain, in New England, is from 50 to 75 miles wide.

III. RIVERS AND LAKES.

6. The *St. John River* rises in the northern part of Maine, flows through New Brunswick, and empties into the Bay of Fundy.

The *St. Croix* is the outlet of *Schoodic* and *Grand lakes.* It forms part of the eastern boundary of Maine, and empties into *Passamaquoddy Bay.*

7. The *Penobscot* flows through eastern Maine. The *Kennebec* is the outlet of *Moosehead Lake.* The *Androscoggin,* which flows through eastern New Hampshire and western Maine, joins the Kennebec near its mouth.

8. The *Salmon Falls River* rises in the White Mountains, and forms part of the boundary between Maine and New Hampshire. The *Merrimac* rises in the White Mountains, and receives the outlet of *Winnipiseogee Lake.*

9. The *Connecticut* is the largest river of New England. It rises in the Height of Land, which forms the boundary between Canada and New Hampshire, flows to the south, and empties into Long Island Sound. Its valley is very fertile and abounds in picturesque scenery.

The *Housatonic* flows through western Massachusetts and Connecticut.

10. New England abounds in lakes and ponds. Those which have already been mentioned are drained into the Atlantic Ocean. *Lake Champlain* is a beautiful sheet of water, over a hundred miles long, on the western boundary of Vermont. It is drained by the *Richelieu,* a tributary of the St. Lawrence.

IV. CLIMATE AND VEGETATION.

11. New England has the coldest climate of any section of the United States. The winters are long and severe, particularly in the north; the summers are short, but warm. Snow and rain are abundant.

12. The forests which cover the mountain slopes consist chiefly of pines, firs, and hemlocks. The forests of the valleys and plains are composed of maples, oaks, walnuts, beeches, and other deciduous trees.

The open country is covered with meadows and cultivated fields.



Gathering Pumpkins.

QUESTIONS.—1. Describe the position of the New England States.—2. Which is the largest state of this section?—3. What part of the Apalachians does New England include?—4. Describe the Green Mountains. The Hoosac and the Taconic mountains.—5. Where are the White Mountains? What is their highest peak? What is the width of the Atlantic coast plain?

6. Describe the St. John River. The St. Croix.—7. The Penobscot. The Kennebec. The Androscoggin. Of what lake is the Kennebec the outlet?

8. Describe the Salmon Falls River. The Merrimac. Of what lake is the Merrimac the outlet?—9. Describe the Connecticut. The Housatonic.—10. Where is Lake Champlain? What river is its outlet? Into what river does the Richelieu empty?

11. Describe the climate of New England.—12. What is said of the vegetation?

V. INHABITANTS AND OCCUPATIONS.

13. The inhabitants of New England are mainly the descendants of the first English settlers. They are noted for their intelligence, enterprise, and industry. The foreign-born citizens are mostly Irish.

14. Building stones of various kinds are quarried in every state. Fine marble and slate are found in western Vermont. Granite is extensively quarried in Maine, New Hampshire, and Massachusetts; and sandstone, in Connecticut.

15. **Agriculture** is carried on extensively, although the soil is not very productive. Irish potatoes, Indian corn, rye, oats, and hay are raised in every state; wheat, mainly in the warmer parts; tobacco, principally in Connecticut.

16. New England is well fitted for **manufacturing**, on account of the great abundance of water-power afforded by its rapid streams. Cotton and woolen goods, boots and shoes, agricultural implements, and machinery are the chief manufactured articles.

17. The leading exports are lumber, ice, granite, marble, and manufactured articles; the leading imports are cotton, wool, iron, coal, and articles of food.

QUESTIONS.—13. What is said of the inhabitants? Of the foreign-born citizens?—14. Name the products of the quarries.—15. Name the chief agricultural products.—16. The principal manufactured articles.—17. The exports. The imports.

VI. STATES AND CITIES.

18. **Maine** is the most eastern state of the Union. Its coast is rocky, and indented by many bays; as, Passamaquoddy Bay, Frenchmans Bay, Penobscot Bay, and Casco Bay.

Agriculture, lumbering, and ship-building are the principal occupations.

Augusta, on the Kennebec, is the capital, and a great depot of the lumber trade. *Portland*, on Casco Bay, is the principal sea-port, and the largest city.

Other towns of importance are *Bangor*, the chief depot of the lumber trade, on the Penobscot; *Bath*, on the Kennebec; *Brunswick*, on the Androscoggin; and *Saco*, on the Saco River.

19. **New Hampshire** lies south-west of Maine. The Salmon Falls River forms part of the eastern boundary. The south-eastern part of the state borders on the ocean.

Farming and manufacturing are the principal occupations of the inhabitants.

Concord, on the Merrimac, is the capital, and has much trade. *Portsmouth* is the only sea-port of importance. *Manchester* and *Nashua*, on the Merrimac, are large manufacturing towns.



View near Newport, R. I.

20. **Vermont** lies west of New Hampshire. The Connecticut forms the eastern boundary. Its western part borders on Lake Champlain. The Green Mountains traverse the state from north to south. The valleys contain much fertile land.

Agriculture and stock-raising are the principal occupations of the people.

Montpelier, on the Onion River, is the capital. *Burlington*, on Lake Champlain, is the largest city. *Rutland* is a pleasant town in the western part of the state.

21. **Massachusetts** lies south of Vermont and New Hampshire. The Connecticut flows through the center of the state; the Housatonic, through the western part.

It is the first cotton manufacturing state of the Union. The articles manufactured are very numerous.

Many of the towns on the sea-coast are largely engaged in the cod and mackerel fisheries on the banks of Newfoundland. The railroad system of the state is very complete.

22. *Boston,* situated at the head of Massachusetts Bay, is the capital, and the largest commercial and manufacturing city of New England. It is noted for its fine schools and institutions of learning. *Cambridge,* the seat of Harvard University, is near Boston. *Worcester* is a thriving manufacturing city.

New Bedford is an active manufacturing town. *Lowell* and *Lawrence,* on the Merrimac, and *Fall River,* on Narragansett Bay, have large cotton factories. *Springfield,* on the Connecticut, has a United States arsenal, where rifles and other arms are manufactured.

23. **Rhode Island,** situated south of Massachusetts, is the smallest state in the Union. Farming and manufacturing are the chief occupations of the people.

Rhode Island has two capitals: *Providence,* on the Blackstone River, and *Newport,* on an island in Narragansett Bay. Newport is a famous watering place.

24. **Connecticut** lies south of Massachusetts and west of Rhode Island. It is crossed from north to south by several ranges of hills. The valleys contain much fertile land. Farming and manufacturing are the chief occupations.

Hartford, on the Connecticut, is the capital. *New Haven,* on Long Island Sound, is the seat of Yale College, and the principal city. *New London,* at the mouth of the Thames, is engaged in the coasting trade. *Bridgeport,* on Long Island Sound, has extensive manufactories.

QUESTIONS.—18. *Maine:* Bound it. Describe its surface. Name the three principal rivers. Name some bays. What is said of the coast? What are the chief occupations? What is the capital? Where is it situated? Where is Portland? Bangor? Bath? Brunswick? Saco?

19. *New Hampshire:* Bound it. What mountains are in this state? What river forms part of its eastern boundary? What part of it borders upon the ocean? What are the principal occupations? What is the capital? On what river is it situated? Where is Portsmouth? Manchester? Nashua?

20. *Vermont:* Bound it. What river separates it from New Hampshire? What mountains traverse it? On what lake does it border? What are the chief occupations? What is the capital? On what river is it situated? Where is Burlington? Rutland?

21. *Massachusetts:* Bound it. What mountains in the western part? What large river flows through the center from north to south? What river flows through the western part? What is the chief occupation? In what occupation are the sea-coast towns engaged?

22. What is the capital? Where is it? Where is Cambridge? Worcester? New Bedford? Lowell? Lawrence? Fall River? Springfield?

23. *Rhode Island:* Bound it. What are the chief occupations? Name the two capitals. Where is Newport? Providence?

24. *Connecticut:* Bound it. What is said of the surface? What are the chief occupations? What is the capital? Where is Hartford? New Haven? New London? Bridgeport?

MAP DRAWING.

MAP OF NEW ENGLAND.

1. Draw six horizontal and five vertical lines, as in the annexed figure. You obtain a rectangle divided into twenty equal squares.

2. Point A is the middle of the side of a square. It marks the most northern extremity of Maine. Point B is the center of a square. Point C is one third below the corner of a square, and is in Passamaquoddy Bay.

3. Points D, E, and F are the corners of squares. Point D is northwest of Casco Bay, and point E marks the eastern extremity of Martha's Vineyard.

4. To find point G, extend the left-hand vertical line one third the side of a square. Point H is one third to the right of the corner of a square, and point I, on the same horizontal line, is in the middle of the side of a square.

5. Connect these points by straight lines and you obtain the fundamental figure of New England. G H roughly marks the western boundary of Connecticut, Massachusetts, and Vermont; H I the northern boundary of Vermont; I A the north-western, A B the northern, and B C the eastern boundary of Maine. C D, D E, E F, and F G mark the coast line in the same manner.

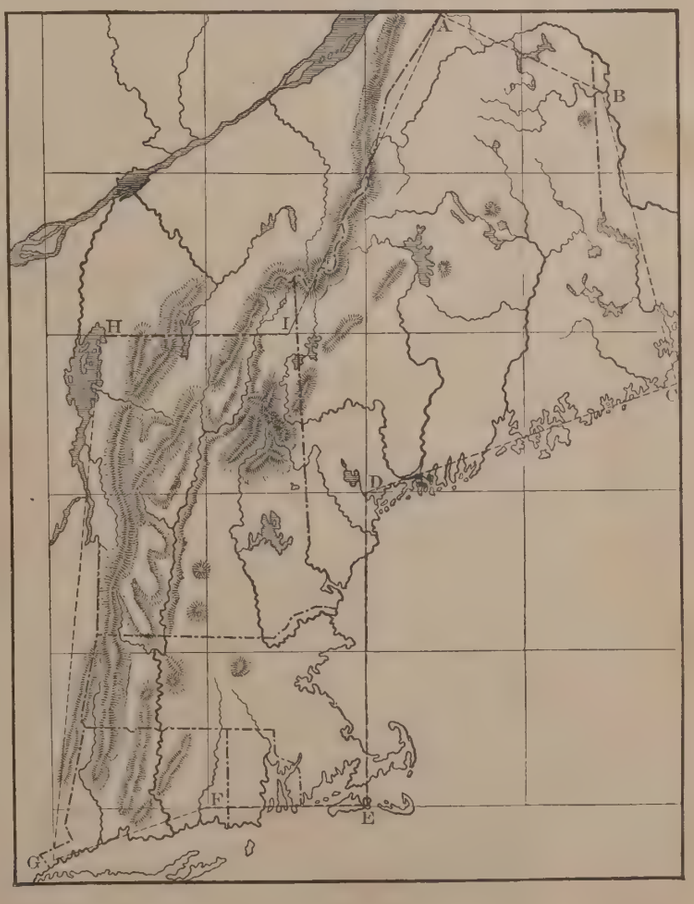
6. Draw the actual boundary line of the section and the boundaries dividing the states.

7. The St. John and one of its tributaries bound Maine on the north, and the Connecticut marks the boundary between New Hampshire and Vermont. Complete these rivers and draw the other rivers and lakes.

8. Draw the mountain chains, particularly the Green Mountains, with their northern and southern continuations, and the White Mountains.

9. Locate the principal cities and letter the map. The lettering should be done in the following order: First, the cities; then, the capes and bays; then, the rivers and mountains; and lastly, the states.

10. One side of a square in this figure is nearly 84 miles. The greatest length from north to south is $5\frac{1}{3}$ times the side of a square, or nearly 448 miles. The greatest width, from point H eastward, is $3\frac{3}{8}$ times the side of a square, or nearly 308 miles. The average width from east to west of the southern part of New England is less than twice the side of a square, or about 160 miles.




MAP OF THE
MIDDLE STATES.
By A. Von Steinwehr.
Scale of Statute Miles.
60 40 30 20 10 0 100 150
1000 Sq. Miles.
West from Washington
West from Greenwich
East from Washington
NEW YORK and VICINITY.
LAKE ONTARIO
LAKE ERIE
PENNSYLVANIA
ALLEGHANY MTS.
Catskill Mts.
Blue Ridge
Cumberland Mts.
Cumberland Top Mountain
Peaks of Otter
Gr. Flat Top Mt.
Gauley Mt.
Greenbrier Mt.
Guyandotte Mt.
Cheat Mts.
Laurel Hill
Chestnut Ridge
Warrior Ridge
Powell's Mt.
Iron Mts.
Kittatinny Mt.
Tuscarora Mt.
Shenandoah R.
Potomac R.
Susquehanna R.
Delaware R.
Allegheny R.
Monongahela R.
Ohio R.
Kanawha R.
Great Kanawha R.
New R.
Roanoke R.
James R.
Appomattox R.
Rappahannock R.
Rapidan R.
Potomac R.
Chesapeake Bay
Delaware Bay
Dismal Swamp
Lake Champlain
Lake George
Lake Winnipiseogee
Lake Memphremagog
Lake Simcoe
Lake St. Clair
Lake Erie
Lake Ontario
Lake Michigan
Lake Huron
Lake Superior
Long Island
Long Island Sound
Block I.
Staten Island
Raritan Bay
Sandy Hook
Lower Bay
Coney I.
Rockaway Pt.
Jamaica Bay
Delaware Bay
Cape May
C. May
C. Henlopen
C. Charles
C. Henry
Atlantic City
Ocean City
Assateague I.
Barnegat Inlet
Sandy Hook
Rouses Pt.
Pt. Covington
Malone
Plattsburgh
Potsdam
Ogdensburgh
Canton
Gouverneur
Saranac Ls.
Elizabethtown
Mt. Marcy
Adirondack Mts.
Burlington
Montreal
Ottawa R.
St. Lawrence R.
Kingston
Port Hope
Colburg
Sacketts Harbor
Watertown
Black R.
Pulaski
Oswego
Oswego R.
Toronto
Hamilton
Niagara R.
Lockport
Albion
Brockport
Rochester
Niagara Falls
Batavia
Tonawanda
Lancaster
Lyons
Clyde
Oneida L.
Oneida
Fulton
Camden
Rome
Utica
Sylvan Beach
Saratoga
Ballston
Johnstown
Amsterdam
Fort Edward
Whitehall
Caldwell
Glens Falls
Sandy Hill
Saratoga
Troy
Cohoes
Waterford
Schenectady
Canajoharie
Mohawk R.
Cooperstown
Albany
Chatham
Hudson
Catskill
Saugerties
Kingston
Rondout
Pine Plains
Poughkeepsie
Fishkill Ldg.
Cold Spr.
Newburgh
Port Jervis
Middletown
West Point
Peekskill
Sing Sing
Yonkers
New York
Brooklyn
Paterson
Hoboken
Jersey City
Newark
Elizabeth
Rahway
Perth Amboy
South Amboy
Keyport
Matawan
Long Branch
Red Bank
Freehold
Flatbush
East New York
Flushing
Astoria
Morrisania
Fordham
Hackensack
Union Hill
Weehawken
Bergen
Belleville
Orange
Montclair
Passaic R.
Hackensack R.
Hudson R.
Newark Bay
Kill van Kull
Arthur Kill
Raritan R.
Raritan Bay
Lehigh R.
Schuylkill R.
Susquehanna R.
Juniata R.
Conemaugh R.
Kiskiminetas R.
Monongahela R.
Youghiogheny R.
Ohio R.
Muskingum R.
Hocking R.
Scioto R.
Kanawha R.
Great Kanawha R.
Big Sandy R.
Guyandotte R.
Tug Fork
Levisa Fork
Kentucky R.
Licking R.
Big Sandy R.
Elk R.
Gauley R.
Greenbrier R.
New R.
Roanoke R.
James R.
Appomattox R.
Rappahannock R.
Rapidan R.
Potomac R.
Shenandoah R.
Cheat R.
Youghiogheny R.
Monongahela R.
Allegheny R.
Susquehanna R.
Delaware

THE MIDDLE STATES.

MAP QUESTIONS.—What states bound this section on the north-east? What ocean on the south-east? What lakes and rivers on the north-west? What states on the west? What state on the south? Name three bays on the Atlantic coast. What state lies in the same latitude as southern New England?

What mountains west of Lake Champlain? Name the principal chains in Pennsylvania. What is their trend? Name the principal chains in Virginia. In West Virginia.

What river empties into the Bay of New York? In what mountains does the Hudson rise? Name its largest western tributary. In what direction does the Mohawk flow? What river forms the eastern boundary of Pennsylvania? What river flows through Pennsylvania and empties into Chesapeake Bay?

Describe the course of the North Branch of the Susquehanna. Of the West Branch. Name the largest western tributary of the Susquehanna. What river forms the southern boundary of Maryland? Where does the Potomac rise? Name the largest tributary of the Potomac. In what direction does the Shenandoah flow? What river empties into the southern part of Chesapeake Bay? Where does the James rise?

What large river bounds New York on the north-west? Name some tributaries of the St. Lawrence in New York. Of what lakes is the St. Lawrence the outlet? What river connects Lake Ontario with Lake Erie?

What two rivers join near Pittsburgh, in western Pennsylvania? What river is formed by the junction of the Monongahela and the Alleghany? Name some tributaries of the Ohio in West Virginia.

Name the states of this section. Which five border upon the Ocean? Which two upon Lake Erie? Which one borders upon Lake Ontario?

Bound New York. What is its capital? On what river is it situated? What city at the mouth of the Hudson? What city on Lake Erie? What city south of Lake Ontario? On what river is Rochester? What city on Long Island, opposite New York?

Bound Pennsylvania. What is its capital? On what river is it situated? What is the largest city? Where is Philadelphia situated? What large city at the junction of the Monongahela and Alleghany? What city on Lake Erie?

Bound New Jersey. What is the capital? On what river is it situated? What city near the Hudson River?

Bound Delaware. What is the capital?

Bound Maryland. What is the capital? Where is it situated? What large city on Chesapeake Bay? On what river is Washington?

Bound Virginia. What is the capital? On what river is it situated? What city south of Richmond?

Bound West Virginia. What is the capital? On what river is it situated? What important cities on the Ohio River?

DESCRIPTION.

I. POSITION AND OUTLINE.

1. The **Middle States** lie south-west of New England. They border upon the Atlantic Ocean, and their coast line embraces three bays. The *Bay of New York* is between Long Island and New Jersey. *Delaware Bay* is between New Jersey and Delaware; *Cape May* and *Cape Henlopen* are at its entrance. *Chesapeake Bay* extends in a northerly direction through Maryland; *Cape Charles* and *Cape Henry* are at its entrance.



Oyster Dredging.

2. Lake Erie, Lake Ontario, and the St. Lawrence bound this section on the north-west. The Ohio forms part of its western boundary.

II. SURFACE.

3. The greater portion of this section is mountainous. Numerous chains of the Apalachian system cross it from north-east to south-west.

4. The *Adirondack Mountains* occupy a large portion of New York north of the Mohawk River and west of Lake Champlain.

The *Catskill Mountains* rise on the west bank of the Hudson, and afford much beautiful scenery.

5. The *Alleghany Mountains* pass through Pennsylvania, Maryland, and Virginia. They are accompanied by many parallel ranges; as, the Blue Mountains in Pennsylvania, and the Great North Mountains in Virginia.

6. The *Blue Ridge* traverses Virginia. West of it is the beautiful Shenandoah Valley.

The *Atlantic coast plain* extends from the Bay of New York to the south-west. It is bounded by the Blue Ridge.

QUESTIONS.—1. Name the three bays on the Atlantic coast. Describe the position of New York Bay. Of Delaware Bay. Of Chesapeake Bay. At the entrance of what bay are Cape May and Cape Henlopen? Cape Charles and Cape Henry?—2. Where is this section bounded by Lake Erie, Lake Ontario, and the St. Lawrence River?

3. What is said of the surface?—4. Where are the Adirondack Mountains? The Catskill Mountains?—5. The Alleghany Mountains? The Blue Mountains and Great North Mountains?—6. Where is the Blue Ridge? The Shenandoah Valley? Describe the Atlantic coast plain.

III. RIVERS AND LAKES.

7. The principal rivers empty into the Atlantic Ocean.

The *Hudson* rises in the Adirondack Mountains and empties into New York Bay. It receives the *Mohawk* from the west, and is navigable to Troy.

The *Delaware* rises near the Catskill Mountains and empties into Delaware Bay.

The *Susquehanna* is formed by the North Branch and West Branch, which join in central Pennsylvania. It empties into Chesapeake Bay. It receives the *Juniata* from the west.

The *Potomac* rises in the Alleghany Mountains and empties into Chesapeake Bay. The *Shenandoah* is its largest tributary.

The *James* rises in the Alleghany Mountains, flows through a gap of the Blue Ridge, and empties into Chesapeake Bay.

8. The rivers of north-western New York belong to the basin of the St. Lawrence. The *Genesee, Oswego,* and *Black Rivers* empty into Lake Ontario.



Corn Husking.

9. The rivers of western Pennsylvania and West Virginia belong to the Mississippi system. The *Alleghany* and the *Monongahela* join at Pittsburgh and form the *Ohio.* The *Great Kanawha* empties into the Ohio.

IV. CLIMATE AND VEGETATION.

10. The climate of this section is warmer than that of New England. The summers of the coast plain of Virginia are quite hot.

11. The soil is generally fertile. Fine forests formerly covered the country; but the plains and valleys have mostly been cleared, and are now under cultivation.

V. INHABITANTS AND OCCUPATIONS.

12. The inhabitants are mostly descended from the English, the Germans, the Dutch, and the Irish.

The first permanent English settlement was made in 1607, at Jamestown, Virginia, on the James River.

13. The leading occupations are mining, agriculture, manufacturing, and commerce. Iron, coal, and petroleum are the principal products of the mines; corn, wheat, oats, hay, tobacco, and wool, the agricultural staples.

14. New York, Pennsylvania, and New Jersey rank next to New England in manufactures. Virginia, Maryland, and Delaware are agricultural states.

The city of New York, in the northern part of this section, is the center of the foreign commerce of our country.

QUESTIONS.—7. Describe the Hudson. The Mohawk. The Delaware. The Susquehanna. The Potomac. The Shenandoah. The James.—8. Describe the Genesee. The Oswego. The Black River.—9. The Alleghany. The Monongahela. The Ohio. The Great Kanawha.

10. What is said of the climate?—11. Of the vegetation?

12. What is said of the inhabitants? Where was the first permanent English settlement made?—13. Name the leading occupations. The mining products. The agricultural staples.—14. What three states have important manufactures? What states are agricultural? What city is the center of the foreign commerce?

VI. STATES AND CITIES.

15. **New York** lies west of Vermont, Massachusetts, and Connecticut. It includes the Hudson and Mohawk valleys, the Adirondack Mountains, the Catskill Mountains, and other ranges of the Apalachian system.

16. The soil of the valleys is very productive and well cultivated. The higher parts afford excellent pasturage. The region occupied by the Adirondack Mountains is unproductive, and therefore very thinly settled.

New York holds the first rank as regards population and commercial activity. It produces more hops than any other state in the Union. Excellent iron ore abounds in the Adirondacks.

17. *Albany,* the capital, is situated on the west bank of the Hudson.

New York, the largest city on the western continent, is situated at the mouth of the Hudson River. Hundreds of steamboats and sailing vessels crowd its wharves at all times. It contains about a million and a quarter inhabitants.



Coal Mines of Pennsylvania.

Brooklyn, opposite New York, on Long Island, is the second city of the state. *Troy* is situated on the Hudson. *Rochester,* on the Genesee, is noted for its flour mills; *Syracuse,* for its salt works. *Buffalo,* on Lake Erie, has an extensive lake commerce.

18. **New Jersey** lies east of the Delaware River, and borders on the ocean. The north-western part is mountainous; the south-eastern belongs to the Atlantic coast plain.

Trenton, the capital, is situated on the Delaware. *Jersey City*, opposite New York, is the principal sea-port. *Newark*, the largest city, has many important manufactories.

19. **Pennsylvania** lies south of New York, and west of New Jersey. Its iron, coal, and petroleum products far exceed those of any other state.

Harrisburg, on the Susquehanna, is the capital.

Philadelphia, on the Delaware, is the second manufacturing city in the Union, and contains, except New York, the greatest number of inhabitants.

Pittsburgh, at the junction of the Alleghany and the Monongahela, has extensive iron and glass works. *Lancaster* is a thriving city in the eastern part of the state. *Erie* is an important town on Lake Erie.

20. **Delaware** borders on Delaware Bay, and lies in the Atlantic coast plain. Its surface is level.

Dover is the capital. *Wilmington*, on Christiana Creek, is the largest city.

21. **Maryland** lies south of Pennsylvania, and north of the Potomac River. It surrounds the upper part of Chesapeake Bay.

Annapolis is the capital. *Baltimore* is the largest city, and one of the principal sea-ports in the Union.

22. **The District of Columbia** is situated on the north bank of the Potomac. *Washington*, the capital of the United States, is situated in this district.

23. **Virginia** extends from Chesapeake Bay to the Cumberland Mountains. The greater part of this state is traversed by ranges of the Apalachian system, which include many beautiful and fertile valleys. The valley of the Shenandoah is the most important of these. Tobacco and grain are the chief products.

Richmond, on the James, is the capital. *Norfolk* has a fine harbor at the mouth of the James.

24. **West Virginia** extends from the Alleghany Mountains to the Ohio and the Big Sandy. It is mountainous or hilly; has fine forests and pastures, and abounds in coal and iron.

Charleston is the capital. *Wheeling*, *Martinsburg*, and *Parkersburg*, are important cities.

QUESTIONS.—15. *New York:* Bound it. Describe its surface. Name its principal rivers.—16. What is said of the valleys? Of the higher parts? Of the Adirondack region? Of the population and commercial activity?—17. What is the capital? Where is it situated? What is said of the city of New York? Where is Brooklyn? Troy? Rochester? Syracuse? Buffalo?

18. *New Jersey:* Bound it. Describe the surface. What is the capital? On what river is it situated? Where is Jersey City? Newark?

19. *Pennsylvania:* Bound it. Name the principal mountain ranges. The principal rivers. In what productions does it excel? What is the capital? On what river is it situated? Where is Philadelphia? What is said of it? Lancaster? Pittsburgh? Erie?

20. *Delaware:* Bound it. What is the surface? What is the capital? Where is Wilmington?

21. *Maryland:* Bound it. What large bay does it partly surround? What part is mountainous? What is the capital? Where is Baltimore? What is said of it?

22. *District of Columbia:* Bound it. What city is situated in it?

23. *Virginia:* Bound it. Name the principal mountain ranges. The principal rivers. Name the most important valley. What is the capital? On what river is it situated? Where is Norfolk?

24. *West Virginia:* Bound it. What is said of the surface? In what minerals does it abound? What is the capital? On what river is it situated? Where are Wheeling and Parkersburg?

MAP DRAWING.

MAP OF THE MIDDLE STATES.

Draw seven horizontal and six vertical lines, as in the annexed sketch. You thus obtain a figure composed of thirty small squares.

2. To find points A, B, G, and K, you divide the sides of the several squares designated into halves.

3. Points C and D are at the corners of squares.

4. Points E, F, and H are found by dividing the sides of their squares into thirds. Point L is at the center of the right hand upper square.

5. From G draw a straight line through H; draw a similar line from L through K, and prolong these two lines until they meet. Their intersection will mark the point I.

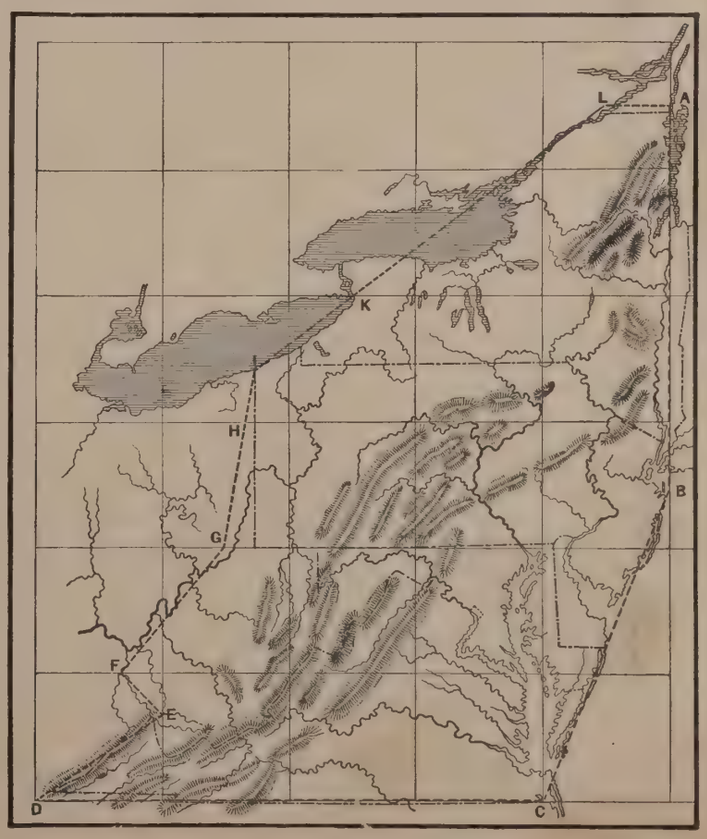
6. Draw the line LA, and connect the several points from A to G in the order of their lettering by straight lines. You will then have formed a rough outline of the section.

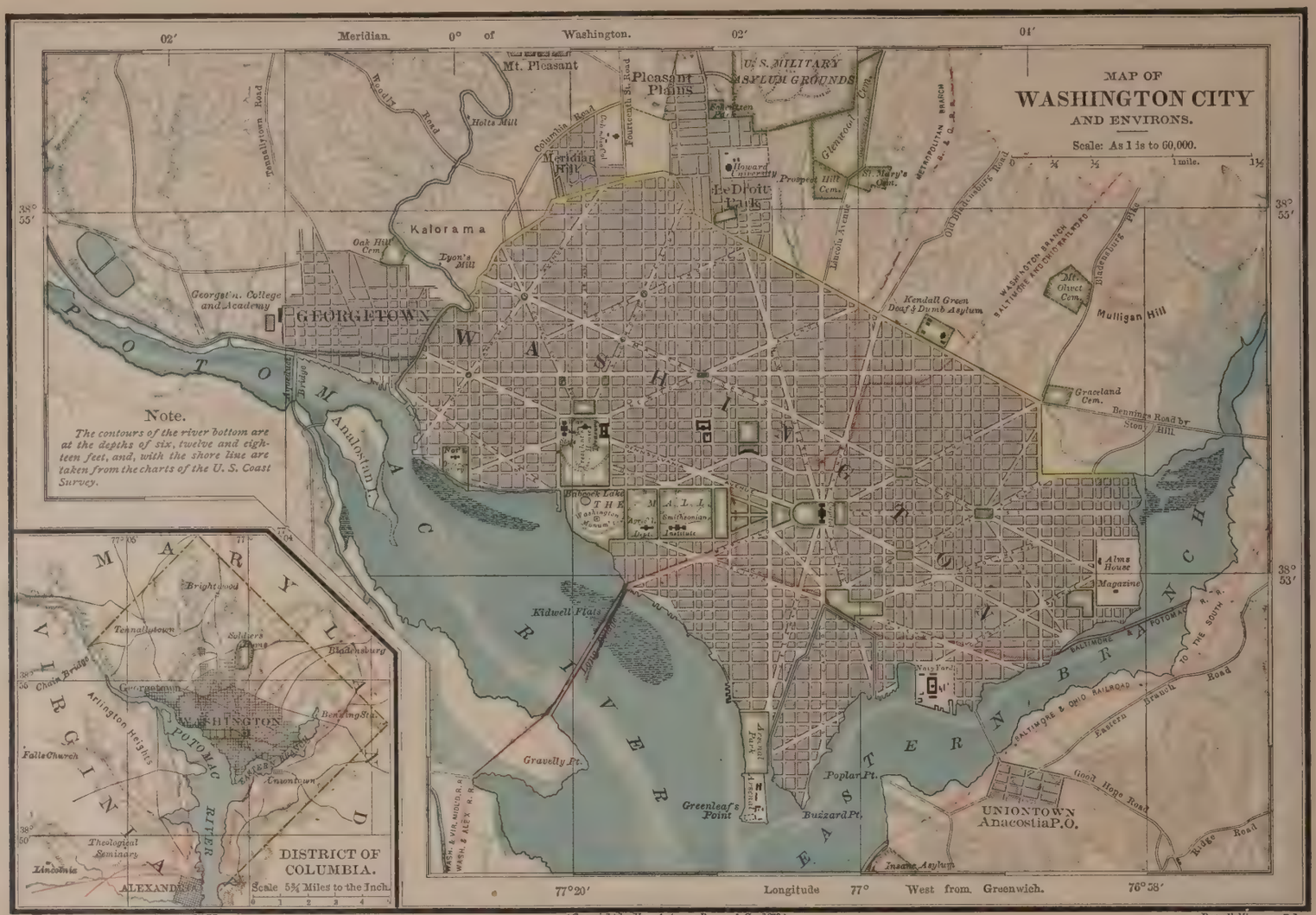
7. Point A is near the north-eastern extremity of New York State, and point B is just east of Sandy Hook. The line AB roughly marks the eastern boundary of New York; and BC, the shore line from Sandy Hook to Cape Henry. CD is nearly identical with the southern boundary line of Virginia. The lines DE, EF, FG, and GI roughly mark the western, as IL marks the north-western, boundary of the section.

8. Draw lakes Erie, Ontario, and Champlain; also, the St. Lawrence River, Bay of New York, Delaware Bay, and Chesapeake Bay. Complete the actual boundary line of the section, and draw the boundary lines between the states.

9. Draw the principal interior lakes, rivers, and mountain chains; locate the chief cities, and letter the map.

10. The length of the side of a small square in the figure is a little more than 100 miles. The distance from Buffalo to the North Carolina state line is then about 400 miles, and from New York City to Pittsburgh about 300 miles. The length of the southern boundary of Virginia is a little more than 400 miles, and of the eastern boundary of New York about 300 miles.





Wm. E. Northrup & Co., Sc., Buffalo, N. Y. (Copyright by Van Antwerp Bragg, & Co., 1879) Russell Hinman, Del.

THE DISTRICT OF COLUMBIA.

1. The **District of Columbia** lies between 38° 48′ and 39° north latitude, and 76° 55′ and 77° 07′ longitude.

2. It is **bounded** on the north-west, north-east, and south-east by the state of Maryland, and on the south-west by the Potomac River, which separates it from Virginia.

Originally the District was ten miles square, and was ceded to the United States by the states of Maryland and Virginia in 1788–9, to be used as the seat of government. The portion south of the Potomac River was ceded back to Virginia in 1846, leaving the remainder, 64 square miles, in its present shape.

3. The **surface** is diversified, the general inclination being from the north to the Potomac River and its Eastern Branch.

Rock Creek, flowing through the north-western part to the Potomac, occupies a deep valley, into which open the valleys of numerous tributaries, which effect the thorough drainage of that section.

Through the south-eastern part runs the Anacostia River, or Eastern Branch of the Potomac, in a broad valley; its shores are fringed in many places with swamps. To the south-east a sharp ridge, some 400 feet high, separates these waters from those of Oxen Run, a tributary of the Potomac.

4. The **climate** is temperate and generally healthy. The mean temperature is 56°; yearly rainfall, 41 inches. Owing to the proximity of the broad sheets of water, sudden variations of temperature, so frequent in the interior states, are rare.

Snow seldom lies on the ground in winter, and the cool evening breezes, which sweep up the valley of the Potomac, depress the average temperature of summer

5. The **soil** is sandy loam mixed with clay, and is quite productive when well cultivated. The **productions** are grain, Indian corn, fruits, and vegetables, a ready and profitable sale for which is found in the Washington and Georgetown markets.

The District is well wooded with various species of oak, maple, chestnut, hickory, etc.

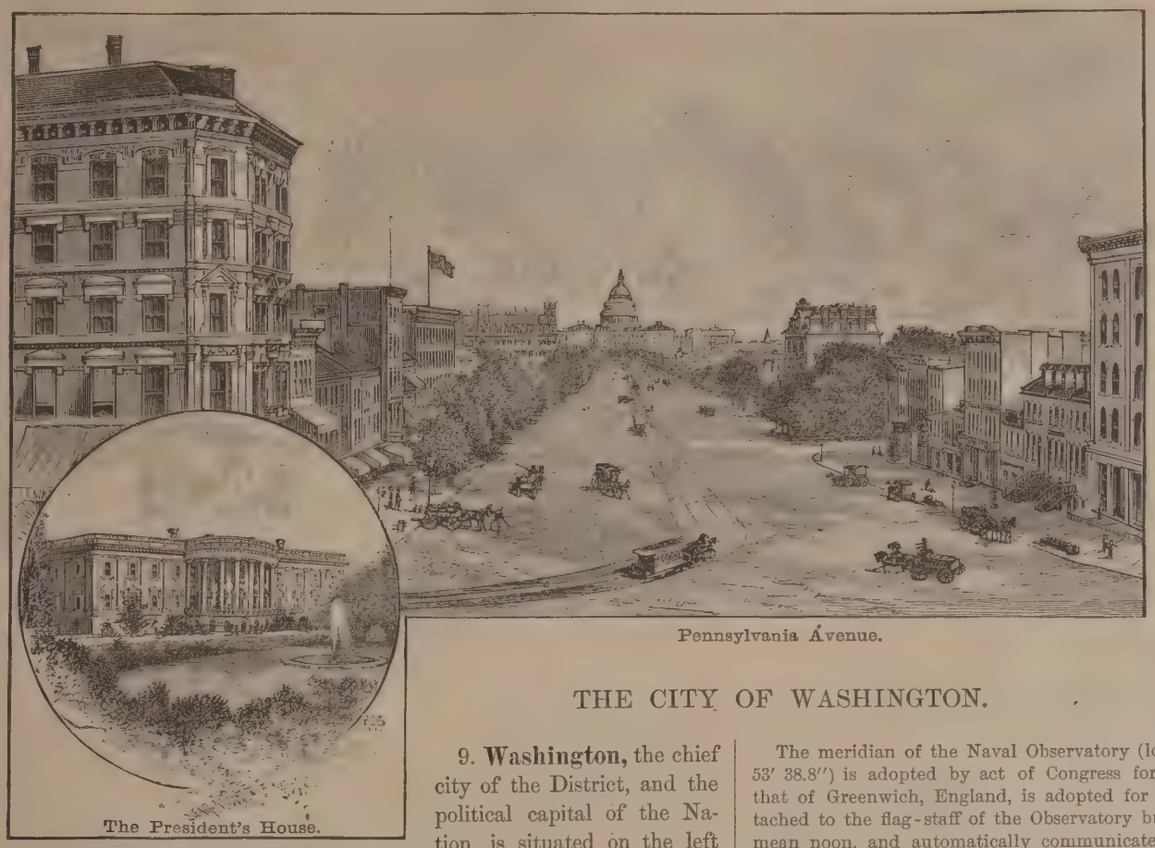
Flour-milling yields the largest income of the various **manufactures** of the District. The real and personal property is estimated at $200,000,000.

6. The **population** in 1880 was 177,624, of which 59,596 were colored, and 17,122 foreign born. There were 45,000 children between the ages of 6 and 17 years (school age), of whom 15,000 were colored.

7. A good system of free **public schools** is inaugurated in the District, which, together with many private schools, several colleges and three universities in Washington and Georgetown, afford ample educational facilities.

8. The government of the District is peculiar. There is no representation in Congress, and the people have no vote in national elections. The *legislative* power is retained by Congress, the *executive* is vested in three Commissioners, appointed by the President, and the *judicial* in a Supreme Court, a Circuit, a Criminal, and a District Court. An appeal lies to the Supreme Court of the United States.

Prior to 1871 the District contained three municipal corporations,—Washington, Georgetown, and the Levy Court of the County of Washington,—each of these passed its own ordinances, under the general supervision of Congress; in that year a territorial government was instituted. In 1874 this was superseded by a provisional government, and in June, 1878, the present form was adopted permanently.



Pennsylvania Avenue.

The President's House.

THE CITY OF WASHINGTON.

9. **Washington,** the chief city of the District, and the political capital of the Nation, is situated on the left bank of the Potomac, between Anacostia River and Rock Creek.

The permanent seat of government being fixed on the Potomac by Congress in 1790, the site of the future city was selected, in 1791, by President Washington, and three commissioners appointed by him for the purpose. The plan of the city was prepared under the direction of the President and the Secretary of State (Thomas Jefferson). Streets running with the cardinal points of the compass, are crossed by diagonal avenues, 120 to 160 feet wide: many square, circular, and triangular spaces, at the intersections of the streets and avenues, being reserved as parks or public "places." The aggregate length of the streets, and avenues is 264 miles, and, with the reservations, they cover more than one half (3,095 acres) of the whole area (6,111 acres or 9½ square miles) within the city limits. In 1793 President Washington laid the corner stone of the capitol, in which Congress first assembled in 1800. In 1802 Washington was incorporated as a city. On the 24th of August, 1814, the British took possession of the city and burned the public buildings, including the library, many of the archives, and the President's house. In the summer of 1864, the Confederates threatened the city, and it was in great danger for a few days. Since the close of the war, the city has improved very rapidly. In 1871 Congress repealed the charters of Washington, Georgetown, and the Levy Court of the County of Washington; substituting for their governments, that of the District of Columbia.

10. The **Capitol** stands near the center of the city, at the west edge of a plateau, the elevation of which is about 90 feet above the river. It is an immense, domed edifice, built principally of white marble and iron, and covers nearly 3½ acres of ground.

This building was commenced four years after the destruction of the first capitol by the British, and was not entirely completed until 1867.

In it are the halls of the two houses of Congress and their several committee-rooms, the rooms of the President and the Vice-President, the rooms of the Supreme Court and of the Court of Claims, the Congressional Library and Copyright Department, etc.

The city is divided into four sections from the capitol as a center. North, and South Capitol streets, are the dividing lines on one side, and East Capitol Street, and the Mall on the other. Commencing at these lines, the streets running north and south bear the numerical names, from First to Twenty-eighth inclusive, while those running east and west are called by the letters of the alphabet, from A to W. The sections are designated by the direction in which they lie from the Capitol; thus, the section north of East Capitol Street, and east of North Capitol Street, is called the Northeast section, and the name of the section is prefixed to the names of the streets lying therein. Thus, the street parallel with North Capitol Street, and five streets from it, in the section above cited, is Northeast Fifth Street, while immediately upon crossing East Capitol Street, the same street becomes Southeast Fifth Street. The avenues have received the names of the different states in the Union—Pennsylvania Avenue is the principal business thoroughfare.

11. The other **public buildings** are those of the Treasury, State, War, and Navy; the President's house, or "White House," as it is usually called; that of the Department of the Interior, containing the Patent Office; of the Post-office Department; of the Department of Agriculture; the Naval Observatory; etc. They are large buildings, generally of granite or marble, advantageously placed at various localities in the north-west section of the city.

The meridian of the Naval Observatory (longitude, 77° 3′ 1.8″; latitude, 38° 53′ 38.8″) is adopted by act of Congress for all astronomical purposes, while that of Greenwich, England, is adopted for all nautical purposes. A ball attached to the flag-staff of the Observatory building, is arranged to fall daily at mean noon, and automatically communicate, by telegraph, the exact time to the different cities of the country.

12. Other public offices occupy rented apartments, as the Department of Justice, the Pension Office, the Bureau of Education, the Coast Survey, etc.

The Mall is a beautiful park of about 100 acres, stretching from the Botanical Gardens, just west of the Capitol, to the Potomac. In this park is the building of the Agricultural Department, and that of the Smithsonian Institution. This noble institution was established in 1846, through the munificence of Mr. James Smithson, an English scientist, "for the increase and diffusion of knowledge among men."

The Navy Yard, on the Anacostia, is a great depot for the manufacture of naval supplies. Near by are the extensive Marine Barracks, the headquarters of the United States Marine Corps. On Greenleaf's Point, at the junction of the Potomac and Anacostia, is located the arsenal and park.



The Treasury Building.

13. The **Washington monument,** near the lower end of the Mall, was commenced in 1848, and, after many years of cessation, it has



State Building.



Soldiers' Home.

been completed. It is a square obelisk, 555 feet 5⅛ inches high, faced with white marble. It is a country's tribute to the memory of its first president. In the squares or circles at the intersection of many of the streets and avenues, statues of distinguished men are placed. Among them are statues of Generals Jackson, Washington, Winfield Scott, and Rawlins; and of Abraham Lincoln abolishing slavery.

The Corcoran Gallery of Art, corner 17th Street and Pennsylvania Avenue, was founded by Mr. W. W. Corcoran, of Washington, and is the only public collection of fine arts in the city.

14. **Charitable institutions** abound in Washington, there being no less than 14 establishments, homes for the infirm, asylums for the indigent, and hospitals for the sick. The National Soldiers' Home, for invalid and infirm soldiers of the regular army, is about three miles north of the city.

It was founded in 1851 with money levied on the City of Mexico, and is sustained by a monthly assessment of 12½ cents on the pay of each private in the army. The grounds now contain about 500 acres, beautifully laid out in drives, lawns, and groves. One of the finest views of Washington is to be had from these grounds.

The principal *cemeteries* are the Congressional, Oak Hill, Glenwood, Graceland, Mount Olivet, and Rock Creek. Opposite Washington, on Arlington Heights, is located a National Soldiers' Cemetery, containing the graves of 16,000 Federal soldiers, who fell during the rebellion.

15. The water supply of Washington is from the Great Falls of the Potomac River, 16 miles above the city. It is brought to the distributing reservoir on Georgetown Heights by an aqueduct with a discharging capacity of 80,000,000 gallons a day. Five daily newspapers, 12 weekly, and several monthly periodicals are published in the city.

16. Three bridges over the Potomac lead to the Virginia shore: Long Bridge, from the foot of Maryland Avenue, having a foot and carriage way, as well as the track of the Washington and Alexandria Railroad; the Aqueduct Bridge, at the foot of Lingan Street, Georgetown, which, besides the foot and carriage way, carries the Georgetown and Alexandria Canal; a new iron truss bridge at Little Falls, four miles above, occupies the site of the old "Chain Bridge." Across the Anacostia are the Navy-yard, and Benning Highway bridges, and the Baltimore and Potomac Railroad bridge and trestle.

17. Washington has an excellent **public school** system, under the immediate supervision of a Board of School Trustees. The public school buildings are among the largest and finest in the country. The white and colored children are taught in separate buildings, and by teachers of their own race. There are many private schools and colleges, and three universities. The latter are: Columbian (Baptist) University, including both law and medical departments; Howard University, founded in 1867, for the education of all youth "without regard to sex or color;" and the National University, incorporated in 1870, of which, only the law department has, as yet, been established. Gonzaga College, a Roman Catholic Institution, is under the control of the Jesuits.

18. The **population** of Washington in 1880 was 147,307, of which 48,179 were colored. Five **railroads** terminate in Washington: the Metropolitan Branch of the Baltimore and Ohio Railroad, from the west; the Baltimore and Ohio Railroad, from the north; the Baltimore and Potomac Railroad, from the north-east; the Alexandria and Washington Railroad, and the Washington City, Virginia Midland, and Great Southern Railroad, from the south.

19. **Georgetown,** situated at the confluence of Rock Creek and the Potomac River, just above Washington, of which it is a suburb, is a fine little city with a population of 12,578 of which 3,759 are colored.

The Chesapeake and Ohio Canal, from Cumberland, Maryland, and the Washington and Alexandria Canal, from Alexandria, Virginia, terminate here.

Georgetown College is one of the largest and finest Catholic educational institutions in the country. A new building has just been completed at a cost of $200,000. The institution is located just west of the city.

QUESTIONS.—1. In what latitude and longitude is the District of Columbia? 2. Of what state was it formerly a part? What river bounds it on the south-west? What was its original extent? Its present extent? 6. What is said of the climate? 7. What is its population? 8. Describe its government. 9. Where is Washington situated? When and by whom was its site selected? When did Congress first assemble there? When and by whom were the public buildings destroyed? 10. What offices in the Capitol building? What is the prominent thoroughfare of Washington? 11. What are the other public buildings? What is said of the Naval Observatory? 14. Where and what is the National Soldiers' Home? 18. What is the population of Washington? What are its railroad facilities? 19. What is said of Georgetown?



Smithsonian Institution.



20. The **government** of the United States is republican. It is composed of two principal elements:

1. The **Federal Government,** which enacts only such laws, and decides only such questions, as affect the welfare of the *whole nation.*

The powers of the Federal Government are enumerated in the Constitution of the United States, which has been adopted by the people of the nation as their supreme law.

2. The **State Governments** which enact laws and decide questions affecting only their respective states.

The power of each state government is limited by the Constitution of the United States, and by its own Constitution. The governmental power is divided into three branches: the *legislative,* or law-making; the *executive,* or law-enforcing; and the *judicial,* or law-interpreting.

21. The *Legislative* power of the **Federal Government** is vested in a Congress consisting of the Senate and the House of Representatives. The Senate is composed of two Senators from each state, chosen by its Legislature for a term of six years. It is presided over by the Vice-president. The House of Representatives is composed of 325 members, elected by the people every two years. One is chosen from each of the Congressional Districts into which every state is divided. The average population of each district is about 150,000.

After passing Congress, a bill, to become a law, must be presented to the President for his signature. If he "veto" (refuse to sign) it, it may become a law by receiving a two thirds majority in each House of Congress.

22. The *Executive* power is vested in a President, who, with a Vice-president, is elected for a term of four years by a majority vote of a College of Electors. Electors are chosen by the people of the various states, each state being entitled to as many Electors as it has Senators and Representatives. The principal duties of the President are to see that the laws of the land are executed, to sign or veto acts of Congress, and to commission United States officers. The Vice-president becomes President in case of the death or removal of the President elected.

The President is assisted in his decisions by the advice and counsel of a Cabinet, composed of the heads of the seven departments into which the Executive branch of the Government is divided. They are: the Secretaries of State, of War, of the Treasury; the Attorney-general, the Postmaster-general; and the Secretaries of the Navy, and of the Interior.

23. The *Judicial* power is vested in a Supreme Court, 9 Circuit, and 58 District courts, and 1 Court of Claims. Its duties are to interpret the laws passed by Congress, decide cases in which the United States is a party, or in which the parties are two or more states, or one or more states against citizens of other states.

The Supreme Court is composed of one Chief Justice, and eight Associate Justices. It holds one term annually at the seat of Government, and is the highest judicial tribunal in the land.

24. The *Legislative* power of the **State Governments** is vested in a body, variously styled in the different states the Legislature, the General Assembly, or the General Court. It is composed of two houses, whose members are elected by the people of the state, and it makes laws for the state.

25. The *Executive* power is vested in a Governor, who is elected by the people, and whose duties in relation to his state are analogous to those of the President, to the United States. He is generally assisted by a Lieutenant-governor, Secretary of State, an Auditor of Accounts, and several Commissioners.

26. The *Judiciary* consists of a Supreme and several inferior courts, such as the Circuit, or County, Courts, Probate Court, and Justices of Peace. The Supreme Court interprets the state laws, and with the other courts, has an extensive jurisdiction, principally in cases in which both parties to the suit are citizens of the state.

27. The states are divided into **counties** (called *parishes* in one state,) for the purpose of maintaining roads, school and court-houses, jails, etc. The usual county officers are a Board of Commissioners, a Register of Deeds, a Clerk of the Court, a Sheriff, etc.

28. **Municipal** or **City Government** originates with the state government, and can do nothing inconsistent with its laws.

The *Legislative* branch is usully called the Common Council, and consists of a Board of Aldermen and one of Councilmen. They are elected by the people, and pass ordinances relating to municipal taxes, education, the police, etc.

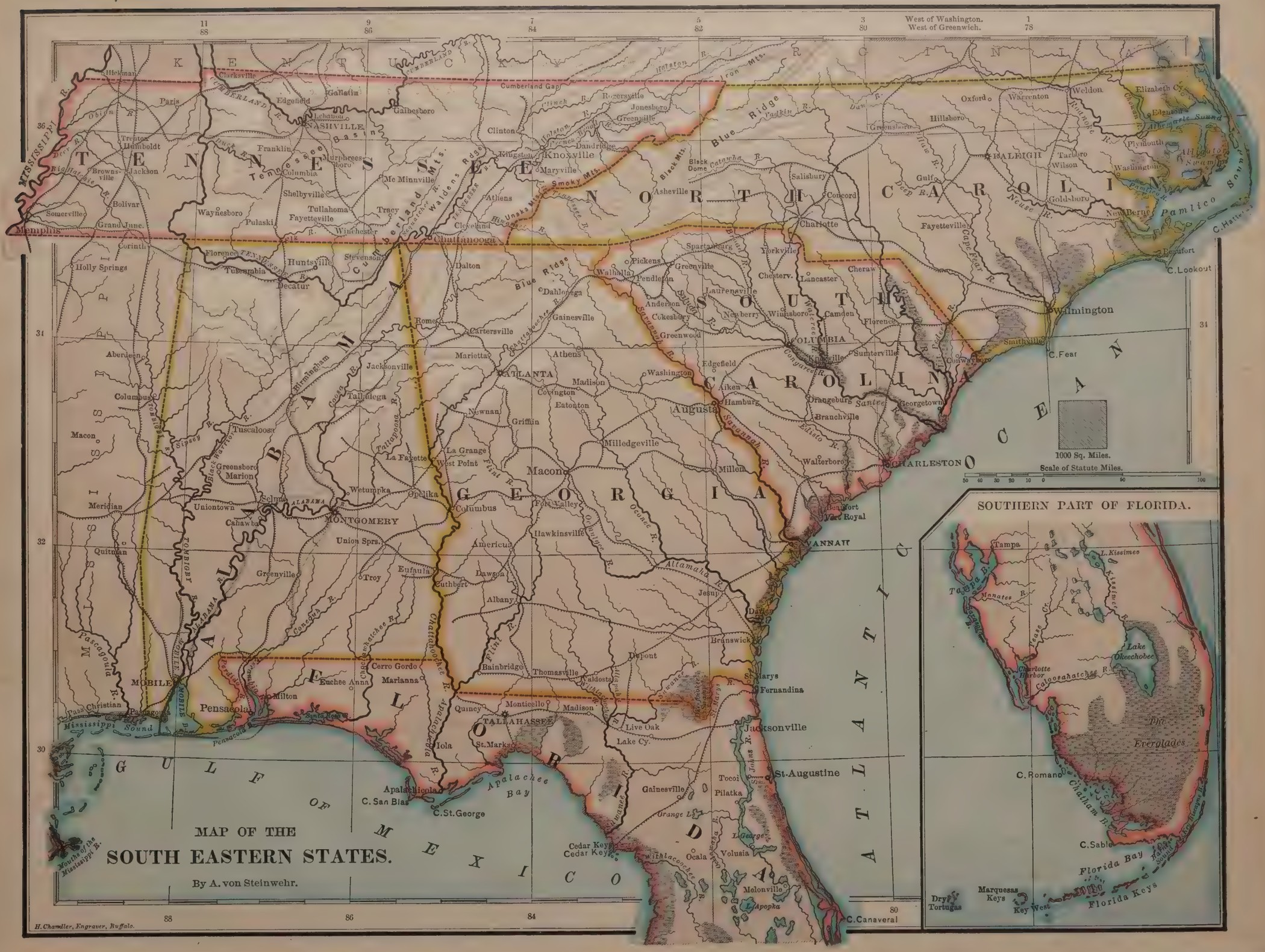
The *Executive* power is vested in a Mayor, who is elected by the people to administer the ordinances, and with the assistance of the police to maintain order.

The *Judicial* branch generally consists of a Municipal or Police Court, which punishes petty offenders against law and order.

29. There are 8 organized Territories belonging to the United States, which have the following **Territorial Goverment:** A *Legislative Assembly,* consisting of a Council and House of Representatives, is elected by the people. The *Executive* power is vested in a Governor, who, with a Secretary, Chief Justice, and two Associate Justices, Attorney, and Marshal, is appointed for four years by the President, with the consent of the Senate. The Governor has the veto power, modified as in the case of the President. The *Judicial* power is vested in a Supreme Court, District and Probate courts, and Justices of the Peace. Each territory is allowed one representative in Congress, who has the privilege of debate, but not of a vote.

30. Besides the above, there are two **unorganized territories** belonging to the United States,—*Alaska* and the *Indian Territory.* These are under direct control of the Federal Government—Congress, the President, and the United States Courts. A special agent is appointed to collect the revenue on the furs obtained in Alaska. The *Indian Territory* is a government reservation for the Indians.

QUESTIONS.—20. What is the form of the United States Government? Of what two elements is it composed? What are the functions of each? Into what branches is each divided? 21. How is the legislative power vested? Of what is Congress composed? How is an act of Congress legalized? 22. What officer is the President? What are his duties? By whom is he assisted? 23. Describe the Judiciary. 24–26. Describe the system, branches, and officers of the State Governments. 27. How are the states subdivided, politically? For what purpose? How are the subdivisions governed? 28. Describe Municipal Government. 29. Describe Territorial Government. 30. What are the remaining portions of the United States? How are they governed?


MAP OF THE
SOUTH EASTERN STATES.
By A. von Steinwehr.
H. Chandler, Engraver, Buffalo.
SOUTHERN PART OF FLORIDA.
West of Washington.
West of Greenwich.
1000 Sq. Miles.
Scale of Statute Miles.
TENNESSEE
ALABAMA
MISSISSIPPI
GEORGIA
SOUTH CAROLINA
NORTH CAROLINA
FLORIDA
GULF OF MEXICO
ATLANTIC OCEAN
Nashville Basin
Cumberland Mts.
Cumberland Gap
Blue Ridge
Smoky Mts.
Black Mts.
Black Dome
Iron Mts.
Unaka Mts.
Waldens Ridge
Cumberland R.
Tennessee R.
Mississippi R.
Ohio R.
Alabama R.
Tombigbee R.
Tallapoosa R.
Coosa R.
Chattahoochee R.
Flint R.
Apalachicola R.
Apalachee Bay
Altamaha R.
Ocmulgee R.
Oconee R.
Savannah R.
Edisto R.
Santee R.
Pee Dee R.
Waccamaw R.
Cape Fear R.
Deep R.
Yadkin R.
Catawba R.
Broad R.
Saluda R.
Congaree R.
Neuse R.
Roanoke R.
Chowan R.
Pamlico Sound
Albemarle Sound
Dismal Swamp
Okefenokee Swamp
Everglades
Lake Okeechobee
Florida Bay
Florida Keys
Tampa Bay
Apalachee Bay
Mississippi Sound
Pensacola Bay
Chatham Bay
Withlacoochee R.
Suwanee R.
St. Johns R.
St. Marys R.
Kissimee R.
Manatee R.
Caloosahatchee R.
Indian R.
Mouths of the Mississippi R.
Memphis
Nashville
Chattanooga
Knoxville
Atlanta
Montgomery
Mobile
Pensacola
Tallahassee
Columbia
Augusta
Charleston
Savannah
Wilmington
Raleigh
Charlotte
Jacksonville
St. Augustine
Fernandina
Tampa
Key West
Dry Tortugas
Marquesas Keys
C. Fear
C. Lookout
C. Hatteras
C. Canaveral
C. Romano
C. Sable
C. San Blas
C. St. George

THE SOUTH EASTERN STATES.

MAP QUESTIONS.—What two sections bound this section on the north? What ocean on the east? What gulf on the south? Name three capes on the shore of North Carolina. Which of these lies farthest east? What two sounds on the coast of North Carolina? What cape on the eastern coast of Florida? What cape at the southern end of Florida? What bay extends into Alabama?

What part of this section is mountainous? To what system do these mountains belong? What is the general direction of ranges? What range is farthest east? What chain on the boundary between North Carolina and Tennessee? What river west of the Smoky Mountains? What mountains west of the upper Tennessee River?

What two rivers empty into Albemarle Sound? What two rivers empty into Pamlico Sound? What river empties near Cape Fear? What two rivers flow through South Carolina? What river forms the boundary between South Carolina and Georgia? What river flows through Georgia?

What two rivers form the Altamaha River? What river forms part of the boundary between Alabama and Georgia? What river joins the Chattahoochee? What river is formed by the junction of the Chattahoochee and the Flint? What river on the western boundary of Florida?

What river empties into Mobile Bay? What two rivers unite to form the Mobile? What two rivers form the Alabama? What large river flows through northern Alabama? What two rivers form the Tennessee? Through what parts of Tennessee does it flow? What river flows through northern Tennessee? What lake in southern Florida?

Name the two most northern states of this section. What three states lie south of Tennessee and North Carolina? What state lies south of Georgia and Alabama?

Bound North Carolina. What is the capital? What city near the mouth of Cape Fear River?

Bound South Carolina. What is the capital? On what river is it situated? What is the principal sea-port?

Bound Georgia. What is the capital? Where is it situated? What city near the mouth of the Savannah River? What city farther north on the Savannah River?

Bound Alabama. What is the capital? On what river is it situated? What is the principal sea-port? On what bay is Mobile situated?

Bound Florida. What is the capital? Where is it situated? What sea-port in the western part of the state? What city near the mouth of St. John River?

Bound Tennessee. What is the capital? On what river is it situated? What city in the south-western part, on the Mississippi? What city on the Holston?

DESCRIPTION.

I. POSITION.

1. This section occupies the south-eastern part of our country, and comprises five states: North Carolina, South Carolina, Georgia, Alabama, and Florida.

Tennessee is also described in this chapter, although it lies in the Mississippi Valley, and belongs to the Central States.

The South-eastern States border on the Atlantic Ocean and the Gulf of Mexico.

2. *Albemarle* and *Pamlico Sounds* are the largest indentations on the Atlantic coast. They are separated from the ocean by long and narrow islands. *Cape Hatteras* is on one of these. *Cape Lookout* and *Cape Fear* lie farther south-west.

3. *Tampa Bay*, in Florida, and *Mobile Bay*, in Alabama, are the largest bays on the coast of the Gulf of Mexico.

II. SURFACE.

4. This section includes the southern part of the Apalachian mountain system. The principal ranges trend from north-east to south-west.

The most easterly of these is the *Blue Ridge*, which extends through western North Carolina and north-eastern Georgia.

5. Farther to the west, and parallel with the Blue Ridge, are the *Smoky Mountains*.

Several ranges, trending from north-west to south-east, connect the Blue Ridge with the Smoky Mountains. One of them, the *Black Mountains*, is the highest of the entire Apalachian system. The *Black Dome* exceeds Mount Washington in elevation.

6. The fertile *Valley of East Tennessee* lies west of the Smoky Mountains. It is the southern continuation of the Shenandoah Valley. Still farther west are the *Cumberland Mountains*, a continuation of the chain which forms the boundary between Virginia and Kentucky.

7. The mountain region of this section is surrounded upon three sides by low plains. The *Atlantic Coast Plain* is on the east and south; the *Mississippi Valley*, on the west.

QUESTIONS.—1. Name the states included in this section. On what waters do the south-eastern states border?—2. Where is Albemarle Sound? Pamlico Sound? Cape Hatteras? Cape Lookout? Cape Fear?—3. Where is Tampa Bay? Mobile Bay?

4. What mountain system lies partly in this section? What is the direction of the principal ranges? Where is the Blue Ridge?—5. Where are the Smoky Mountains? What is said of the Black Mountains? The Black Dome?—6. Where is the Valley of East Tennessee? Where are the Cumberland Mountains?—7. What low plains nearly surround the mountains of this section?

III. RIVERS.

8. The principal rivers of this section rise in the Apalachian Mountains, and empty either into the Atlantic Ocean or the Gulf of Mexico, or are tributaries of the Mississippi.

9. The following rivers empty into the Atlantic: the *Roanoke*, *Neuse*, and *Cape Fear rivers*, in North Carolina; the *Great Pedee*, which rises in the Blue Ridge and flows through North and South Carolina; the *Santee*, which is formed by the junction of the *Congaree* and the *Wateree;* the *Savannah*, which forms the boundary between Georgia and South Carolina; the *Altamaha*, which is formed by the junction of the *Oconee* and the *Ocmulgee;* and the *St. John*, which flows through Florida from south to north.



Wreck on the Florida Keys.

10. The following rivers empty into the Gulf of Mexico: the *Suwanee,* in northern Florida; the *Apalachicola,* formed by the junction of the *Chattahoochee* and the *Flint;* and the *Mobile,* formed by the junction of the *Alabama* and the *Tombigby.*

11. The *Cumberland* and the *Tennessee* belong to the Mississippi system, and empty into the Ohio. The Tennessee is formed by the confluence of the *Holston* and the *Clinch,* which rise in Virginia.

IV. CLIMATE AND VEGETATION.

12. This section has a much warmer climate than the Middle States. The winters are mild, and the summers long and warm. Rain falls in all seasons of the year, and there is no lack of moisture.

13. The vegetation is very luxuriant. The mountain slopes are covered with *deciduous* trees; the tops with *pines* and *balsam firs.* The forests of the low plains present a great variety of trees. Many of them are evergreens; as, the *live oak,* the *magnolia,* and the *palmetto,* the smallest of the American palms.

V. INHABITANTS AND OCCUPATIONS.

14. The white inhabitants are mostly of English descent. A large part of the population consists of negroes. The states of this section are thinly inhabited. Florida, though larger than the state of New York, has not so many inhabitants as the city of Baltimore.

15. The leading occupation of the south-eastern states is agriculture. Cotton, corn, and sweet potatoes are the principal products. Rice is extensively cultivated on the low marshes, near the sea-shore, in South Carolina, Georgia, and Florida.

QUESTIONS.—8. Where do the principal rivers of this section rise and empty?—9. Describe the Roanoke. The Neuse. Cape Fear River. The Great Pedee. The Santee. The Savannah. The Altamaha. The St. John.—10. Describe the Suwanee. The Apalachicola. The Mobile.

11. Describe the Cumberland. The Tennessee.

12. What is said of the climate of this section?—13. Of the vegetation? Name some evergreen trees.

14. What is said of the white inhabitants? Of negroes?—15. What is the leading occupation? Name the principal products.

VI. STATES AND CITIES.

16. **North Carolina** lies south of Virginia, and extends from the sea-shore to the Smoky Mountains. It includes the Black Mountains, the highest range of the Apalachian system.

There are extensive pine forests on the Atlantic coast plain, which yield pitch, tar, and turpentine.

Raleigh, west of the Neuse, is the capital. *Wilmington,* near the mouth of Cape Fear River, is the principal sea-port.

17. **South Carolina** lies between North Carolina and the Savannah River. Some spurs of the Blue Ridge extend into its north-western corner. The larger portion of the state lies on the Atlantic coast plain. The shores of the lower river courses are swampy, but well adapted to the cultivation of rice.

Columbia, on the Congaree, is the capital; *Charleston* is the principal sea-port, from which large quantities of cotton and rice are exported.

18. **Georgia** lies south-west of South Carolina. The larger part of the state is level or undulating. The Blue Ridge extends into the northern part.

Georgia has productive coal and iron mines. Some gold is also found in this state. Cotton, rice, tobacco, and Indian corn are the principal products.

Atlanta, east of the Chattahoochee, is the capital. *Savannah,* near the mouth of the Savannah River, is the largest sea-port. *Milledgeville,* on the Oconee, was formerly the capital. *Augusta,* on the Savannah, and *Columbus,* on the Chattahoochee, are flourishing cities.

19. **Alabama** lies west of Georgia. The Chattahoochee forms part of its eastern boundary. The north-eastern part is traversed by several mountain ridges belonging to the Apalachian system.

The valleys of the Alabama and the Tombigby, in the south, and of the Tennessee, in the north, are the richest portions of the state.

Montgomery, on the Alabama, is the capital, and an important center of the cotton trade. *Mobile,* on Mobile Bay, is the principal sea-port. *Selma,* on the Alabama, and *Huntsville,* in the valley of the Tennessee, are thriving towns.

20. **Florida** lies south of Georgia and Alabama. It embraces the peninsula of Florida and a belt of country extending along the shore of the Gulf of Mexico.

It is low and level, as it lies entirely on the Atlantic coast plain. The *Florida Keys*, a chain of coral islands, lie south of this state.



Swamp in Florida.

Florida has many large lakes and swamps. The *Everglades*, south of Lake Okeechobee, are vast fields of coarse grass, springing from a soil of quicksand and soft mud. They include many islands of remarkable fertility.

Tallahassee is the capital. *Pensacola* has a fine harbor. *St. Augustine*, on the Atlantic coast, is the oldest town in our country. *Key West*, in the south, is the largest city.

21. **Tennessee** lies west of North Carolina, and extends from the crest of the Smoky Mountains to the Mississippi. The eastern part is mountainous; the central, hilly; the western, low and level. The Tennessee crosses the state twice. The Cumberland flows through the northern part.

Cotton, corn, and wheat are extensively cultivated. Many fine horses, mules, and sheep are raised.

Nashville, on the Cumberland, is the capital. *Knoxville*, on the Holston, is situated in a rich agricultural district. *Memphis*, on the Mississippi, is a thriving commercial city. *Chattanooga*, on the Tennessee, is an important railroad center.

QUESTIONS.—16. *North Carolina:* Bound it. Name the principal mountain chains. Through what part of the state do they pass? Describe the principal rivers. What do the pine forests yield? What is the capital? Where is it situated? Where is Wilmington?

17. *South Carolina:* Bound it. Describe the surface. Name the principal rivers. Where is rice cultivated? What is the capital? On what river is it situated? Where is Charleston?

18. *Georgia:* Bound it. Name the principal mountain chain. The rivers. The products. What is the capital? Where is Savannah? Milledgeville? Augusta? Columbus?

19. *Alabama:* Bound it. Describe the surface. What are the richest parts of the state? What is the capital? On what river is it situated? Where is Mobile? Selma? Huntsville?

20. *Florida:* Bound it. Describe the surface. The principal rivers. Where are the Florida Keys? What are the Everglades? What is the capital? In what part of the state is it situated? Where is Pensacola? St. Augustine? Key West?

21. *Tennessee:* Bound it. Describe the surface. The principal rivers. Name the products. What is the capital? Where is it? Where is Knoxville? Memphis? Chattanooga?

MAP DRAWING.

MAP OF THE SOUTH EASTERN STATES.

1. Draw four horizontal and four vertical lines, as in the annexed sketch. You thus obtain a figure, divided into nine small squares.

2. Point A is the left-hand upper corner of a square. Point B is half the length of a square beyond the right-hand upper corner. Draw the vertical line B C equal in length to half the side of a square.

3. Point D is the center of the side of a square. Prolong the vertical line which passes through D by half the length of a square, and you obtain point F. Draw a horizontal line through F; point E is on this line. E F is equal to B C.

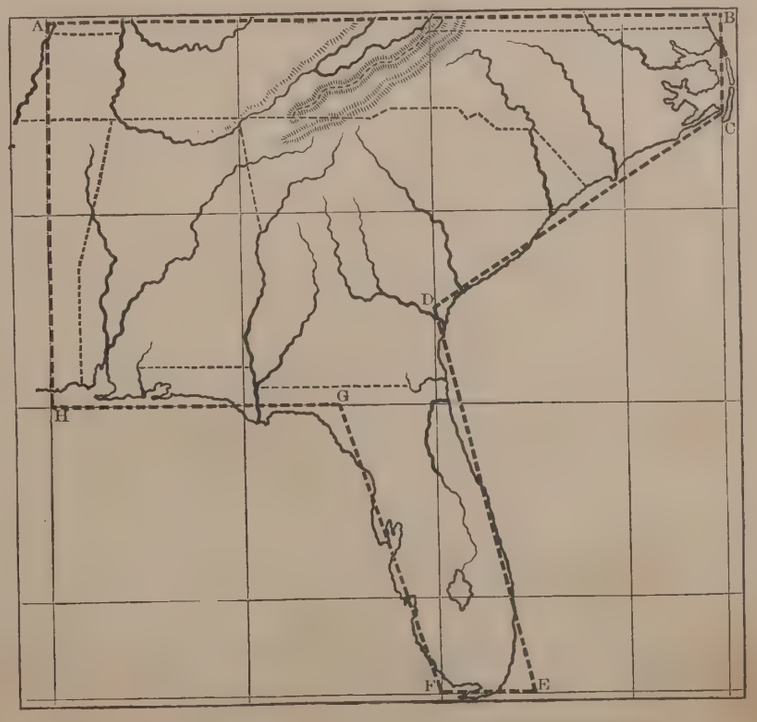
4. Point G is the center of the side of a square, and point H is at the corner of a square. Connect these points by straight lines, and you obtain the fundamental figure of the South-eastern States. Draw the land boundaries and the coast line of this section.

5. The line A B marks the northern boundary of Tennessee, and nearly that of North Carolina. C D roughly marks the coast from Cape Hatteras to the mouth of the Altamaha.

6. The line D E roughly marks the eastern coast of Florida, and the line F G, the western. Cape Sable is near the line E F. The line G H roughly marks the coast of the Gulf of Mexico.

7. Draw the rivers, the state boundaries, and then the mountains. Locate the principal cities, and letter the map.

8. The length of the side of a square is a little over 220 miles. Hence, the width of Tennessee is about 110 miles, or half the side of a square. From the northern boundary of Tennessee to the coast of the Gulf of Mexico is about 440 miles, and to Cape Sable, over 770 miles.




NORTH CENTRAL STATES
EAST OF THE MISSISSIPPI.
By A. Von Steinwehr.
1000 Sq. Miles.
Scale of Statute Miles.
0 10 20 30 40 50 60 70 80 90 100
15 92
13 90
11 88
9 86
7 84
5 West of Washington 82
3 West of Greenwich 80
46
44
42
40
38
LAKE SUPERIOR
MICHIGAN
LAKE MICHIGAN
LAKE HURON
GEORGIAN BAY
LAKE ERIE
MINNESOTA
WISCONSIN
ILLINOIS
INDIANA
OHIO
KENTUCKY
TENNESSEE
WEST VIRGINIA
Eagle River
Keweenaw Pt
Caribou I.
Houghton
Duluth
Superior
Ashland
Apostle Is.
Ontonagon
Marquette
White Fish Pt.
Escanaba
Sault St. Marie
St. Joseph I.
North Passage
Drummond
Mackinaw I.
Bois Blanc I.
Cockburn I.
Manitoulin
Great Duck I.
Beaver I.
Fox Is.
Little Traverse
Charlevoix
Cheboygan
Mullet L.
St. Martins
Washington I.
Manitou Is.
Green Bay
Sturgeon Bay
Peshtigo
Oconto
Wausau
Jenny
Chippewa Falls
Eau Claire
Durand
Hudson
Prescott
Stillwater
Black River Falls
Sparta
La Crosse
Winona
Trempealeau
Mauston
Berlin
Princeton
Ripon
Oshkosh
Neenah
Menasha
Appleton
De Pere
Kewaunee
Green Bay
Ft. Howard
Stevens Pt.
Waupun
Portage City
Baraboo
Beaver Dam
Columbus
Watertown
Oconomowoc
Waukesha
White Water
Fond du Lac
Sheboygan
Manitowoc
Ludington
Pent Water
Big Rapids
Hersey
Mt. Pleasant
St. Louis
Howard
Saginaw
E. Saginaw
Port Sanilac
Bay Cy.
Port Austin
Goderich Harbor
Tawas Cy.
Alpena
North Pt.
Thunder B.
Au Sable R.
Traverse City
Elk Rapids
Houghton L.
Manistee
Muskegon
Grand Haven
Ionia
Owosso
Flint
Lapeer
Capac
Attica
Pt. Huron
Sarnia
London
Grand Rapids
Rockford
Ithaca
Hubbardston
Holland
Hastings
Howell
Pontiac
Mt. Clemens
LANSING
Eaton Rapids
Charlotte
Allegan
Battle Creek
Marshall
Kalamazoo
Jackson
Ypsilanti
Ann Arbor
DETROIT
Wayne
Windsor
St. Clair
Thames R.
Ozaukee
MILWAUKEE
Racine
Kenosha
Waukegan
South Haven
Benton Harbor
Paw Paw
Schoolcraft
Evanston
CHICAGO
Berrien Springs
New Buffalo
Michigan Cy.
Cassopolis
Cold Water
Burr Oak
Hillsdale
Adrian
Monroe
Pt. Pelee
Kelley's I.
Ashtabula
Painesville
Jefferson
CLEVELAND
Sandusky
Toledo
Wauseon
Napoleon
Defiance
Fremont
Clyde
Elyria
Berea
Norwalk
Wellington
Medina
Ravenna
Warren
Youngstown
Akron
Alliance
Canton
Salem
Massillon
Wooster
Mansfield
Crestline
Galion
Millersburg
Mt. Gilead
Tiffin
Findlay
Fort Wayne
Ottawa
Van Wert
Upper Sandusky
Lima
Scioto R.
Portland
Huntington
Wabash
Logansport
Winamac
Warsaw
Tippecanoe R.
Kankakee R.
Valparaiso
Plymouth
Auburn
Columbia
Elkhart
South Bend
La Grange
Goshen
Laporte
Michigan City
Aurora
Davenport
Rock Island
Moline
Sandwich
Joliet
Morris
Ottawa
Peru
Buda
Galva
La Salle
Wilmington
Kankakee
Dwight
Lacon
Wenona
Pontiac
Gilman
Metamora
Chenoa
El Paso
Pekin
Bloomington
Normal
Lincoln
Havana
Paxton
Mackinaw R.
Illinois R.
Kickapoo R.
Sangamon R.
Spoon R.
Kentland
Delphi
Marion
Kokomo
Hartford
Bluffton
Muncie
Anderson
Winchester
Union Cy.
Piqua
Greenville
Troy
Urbana
Springfield
Xenia
Dayton
Eaton
Middletown
Hamilton
Wilmington
Washington C.H.
Circleville
Chillicothe
Athens
Parkersburg
Marietta
Nelsonville
Lancaster
Mt. Sterling
London
Granville
Newark
COLUMBUS
Zanesville
Barnesville
Cambridge
Knightstown
Rushville
Connersville
Shelbyville
Franklin
Greencastle
Brazil
Terre Haute
Danville
Crawfordsville
Thorntown
Noblesville
Newcastle
Richmond
INDIANAPOLIS
Attica
Lafayette
Tolono
Champaign
Urbana
Decatur
Newport
Sugar Cr.
Beardstown
Quincy
Jacksonville
SPRINGFIELD
Sullivan
Virden
Shelbyville
Pana
Carrollton
Carlinville
Hardin
Jerseyville
Alton
Edwardsville
St. Louis
ST. LOUIS
Vandalia
Effingham
Charleston
Mattoon
Sullivan
Bloomington
Seymour
Columbus
Lawrenceburg
Aurora
N. Vernon
Connersville
Batavia
Waverly
Jackson
Portsmouth
Ripley
Georgetown
Gallipolis
Pomeroy
CINCINNATI
Hillsboro
Wilmington
Hamilton
Middletown
Madison
Vevay
Carrollton
Maysville
Vanceburg
Ironton
Ashland
Flemingsburg
Grayson
Catlettsburg
Big Sandy R.
Kanawha R.
Guyandotte R.
Valmouth
Cynthiana
Newcastle
Jeffersonville
LOUISVILLE
Shelbyville
Versailles
FRANKFORT
Georgetown
Paris
Owingsville
Louisa
Lexington
Mt. Sterling
Nicholasville
Winchester
Richmond
Lancaster
Danville
Harrodsburg
Bardstown
Elizabethtown
Brandenburg
Owensboro
Henderson
Shawneetown
Carbondale
Grand Tower
Uniontown
Caseyville
Calhoun
Elizabethtown
Jonesboro
Metropolis
Cairo
Madisonville
Hartford
Litchfield
Hodgenville
Munfordville
Greensburg
Lebanon
Crab Orchard
Jackson
Somerset
Caye Cy.
Columbia
Glasgow
Greenville
Princeton
Paducah
Smithland
Cadiz
Hopkinsville
Bowling Green
Russellville
Franklin
Burksville
Monticello
Barbourville
Pine Mts.
Cumberland Mts.
Cumberland R.
Cumberland Gap
Clinch R.
Columbus
Hickman
Mayfield
Kentucky R.
Tennessee R.
Clarksville
Guthrie
Big Black R.
Ohio R.
Mississippi R.
Missouri R.
Illinois R.
Wabash R.
White R.
Kaskaskia R.
Embarras R.
Little Wabash R.
Muskingum R.
Scioto R.
Hocking R.
Great Kanawha R.
Guyandotte R.
Big Sandy R.
Licking R.
Miami R.
Maumee R.
Sandusky R.
Huron R.
Vermilion R.
Black R.
Grand R.
Saginaw R.
Au Sable R.
Manistee R.
Muskegon R.
Thunder B.
Traverse B.
Grand Traverse B.
Saginaw Bay
Matthews, Northrup & Co., Engravers, Buffalo, N.Y.

THE NORTH CENTRAL STATES,

EAST OF THE MISSISSIPPI.

MAP QUESTIONS.—What two rivers bound this section on the west? What two rivers on the east? What mountain chain on the south-east? What three lakes on the north? What lake lies between Michigan and Wisconsin? What strait leads from Lake Michigan into Lake Huron?

What bay on the western shore of Lake Michigan? What bay on the western shore of Lake Huron? What small lake lies between Lake Huron and Lake Erie? What river leads from Lake Huron into Lake St. Clair? What river leads from Lake St. Clair into Lake Erie?

What is the general character of the surface of this section? To what great system do the highlands in the eastern part of this section belong?

What river in this section is the largest tributary of the Mississippi? Name the principal southern tributaries of the Ohio. Through what state do they flow? What river forms part of the boundary between Illinois and Indiana?

What is the principal eastern tributary of the Wabash? Name a tributary of the Ohio River in western Ohio. In eastern Ohio. Name the largest tributary of the Mississippi in Illinois. In Wisconsin. Name two rivers emptying into Green Bay. Name two rivers emptying into Lake Michigan from the east.

Name the six states of this section. Which two are the most northern? Which three are south of Michigan and Wisconsin? Which one is the most southern?

Bound Kentucky. What is the capital? On what river is Frankfort situated? What large city on the Ohio? What city south-east of Frankfort?

Bound Ohio. What is the capital? On what river is it situated? What three cities on Lake Erie? Which of these is at the mouth of the Maumee? What large city on the Ohio? What city on the Miami?

Bound Indiana. What is the capital? On what river is it situated? What town on the Ohio opposite Louisville? What city on the Ohio in the south-western part of the state?

Bound Illinois. What is the capital? What town at the mouth of the Ohio? What town north of the mouth of the Missouri? What town in the northern part of the state, on the Mississippi? What large city on Lake Michigan?

Michigan consists of two peninsulas; what lake and strait separate them? Bound the northern peninsula. The southern. What is the capital? What city on the Detroit River? What city near the mouth of Grand River?

Bound Wisconsin. What is the capital? What city on Lake Michigan Name two towns on the Mississippi.

DESCRIPTION.

I. POSITION.

1. This section extends from the western boundary of the Middle States to the banks of the Mississippi. It is bounded on the north by Lake Superior, Lake Huron, and Lake Erie. Lake Michigan extends between Michigan and Wisconsin.

2. *Keweenaw Bay* extends from Lake Superior; *Green Bay*, from Lake Michigan; and *Saginaw Bay*, from Lake Huron.

II. SURFACE.

3. The *Cumberland Mountains* are the only mountain chain of this section. Their crest forms the boundary between the states of Virginia and Kentucky.

4. The south-eastern part of this section, including parts of Kentucky, Ohio, and Indiana, is occupied by a low and broken table-land, which forms the western extension of the Apalachian mountain system.

5. Northern Michigan and Wisconsin occupy a similar table-land. The remainder is a low plain, which slopes either toward the Mississippi and Ohio or toward the Great Lakes.

III. RIVERS AND LAKES.

6. The rivers of this section are tributaries either of the Mississippi or of the St. Lawrence.

The *Ohio* is the largest eastern tributary of the Mississippi. It forms the southern boundary of Ohio, Indiana, and Illinois, and the northern boundary of Kentucky.

7. The following rivers empty into the Ohio from the south: the *Big Sandy*, which forms part of the eastern boundary of Kentucky, the *Kentucky*, the *Cumberland*, and the *Tennessee*.

The Cumberland rises in the Cumberland Mountains, flows through eastern Kentucky and Tennessee, and, turning north, traverses western Kentucky. The courses of the Cumberland and the Tennessee are nearly parallel, each describing a large curve toward the south. Their mouths are but a few miles apart.



The University of Michigan.

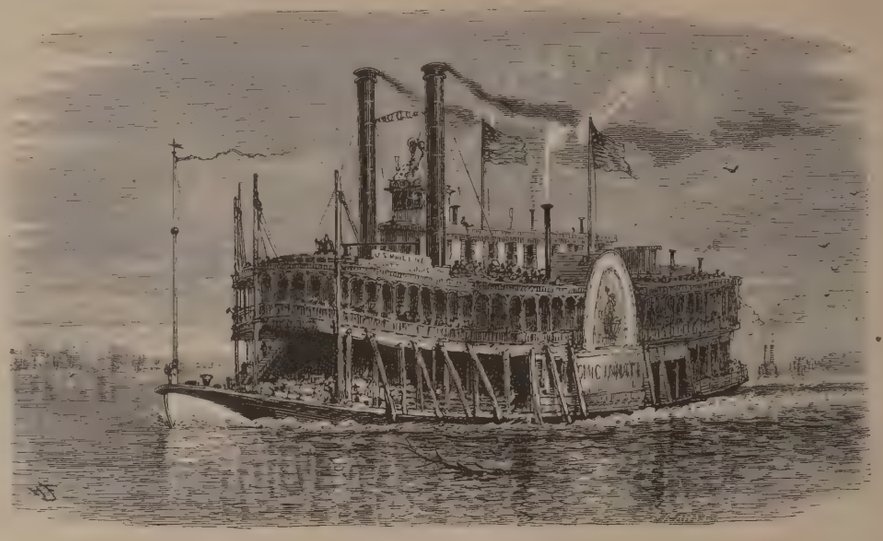
8. The following rivers enter the Ohio from the north: the *Muskingum*, *Scioto*, and *Miami*, flowing through Ohio, and the *Wabash*, flowing through Indiana, and partly separating Indiana from Illinois.

9. The following rivers empty into the Mississippi: the *Kaskaskia* and the *Illinois*, flowing through Illinois; the *Wisconsin* and the *Chippewa*, flowing through Wisconsin; and the *St. Croix*, separating Wisconsin from Minnesota.

10. The rivers which empty into the Great Lakes belong to the St. Lawrence river system. The *Fox*, *Menominee*, *Muskegon*, and *Grand* rivers empty into Lake Michigan; the *Saginaw* empties into Lake Huron, and the *Maumee* into Lake Erie

11. *Lake Superior*, *Lake Huron*, and *Lake Erie* bound this section on the north. *Lake Michigan* extends to the south-west from Lake Huron. These four lakes, and *Lake Ontario*, north of New York, belong to the St. Lawrence river system.

Lake Superior is connected with Lake Huron by the *River St. Mary;* Lake Huron with Lake Michigan by the *Strait of Mackinaw;* and Lake Huron with Lake Erie, by *St. Clair River*, *Lake St. Clair*, and *Detroit River.*



A Western Steamboat.

QUESTIONS.—1. What river bounds this section on the west? What lakes on the north?—2. Where is Keweenaw Bay? Green Bay? Saginaw Bay?

3. Where are the Cumberland Mountains?—4. What parts of this section belong to the Apalachian system?—5. What other parts occupy a table-land?

6. To what systems do the rivers of this section belong? Describe the course of the Ohio.—7. Describe the Big Sandy. The Kentucky. The Cumberland. The Tennessee.—8. Describe the Muskingum. The Scioto. The Miami. The Wabash.—9. Describe the Kaskaskia. The Illinois. The Wisconsin. The Chippewa. The St. Croix.

10. Describe the Menominee. The Muskegon. The Grand River. The Saginaw. The Maumee.—11. Name the five Great Lakes. Which is the most western? What river connects Lake Superior and Lake Huron? What strait leads from Lake Huron into Lake Michigan? What two rivers and what lake connect Lake Huron with Lake Erie?

IV. CLIMATE AND VEGETATION.

12. The climate of this section resembles that of the eastern states in the same latitude. The southern parts are much warmer than the northern.



Tobacco.

13. Extensive forests of deciduous trees cover the greater part of this section. *Prairies* abound in Illinois and western Indiana. The soil of the prairies is exceedingly fertile, and sustains a luxuriant growth of herbs and grasses.

V. INHABITANTS AND OCCUPATIONS.

14. The people in the states north of the Ohio are chiefly descendants of emigrants from New England and the Middle States; in Kentucky, of emigrants from Virginia and North Carolina. The foreign inhabitants are mostly Germans and Irish.

15. *Agriculture* is the principal occupation of the inhabitants. Wheat and corn are raised in all the states of this section. Illinois, Ohio, and Indiana raise more corn than any other states. Kentucky produces hemp and tobacco.

16. The mines of Michigan, on Lake Superior, yield large quantities of copper and iron. South-western Wisconsin and north-western Illinois contain rich lead mines.

QUESTIONS.—12. What is said of the climate of this section?—13. What part is covered with forests? Which states contain prairies? What is said of them?

14. What is said of the population?—15. What is the principal occupation? What products are raised? What state produces hemp, corn, and tobacco?—16. Where are copper and iron mines? Where are lead mines?

VI. STATES AND CITIES.

17. **Kentucky** extends from the Cumberland Mountains to the Mississippi. The principal products are hemp, wheat, corn, and tobacco, and fine blooded stock.

Frankfort, on the Kentucky River, is the capital. *Lexington* is the seat of the University of Kentucky. *Louisville*, on the Ohio, is the largest city.

18. **Ohio** lies between the Ohio River and Lake Erie. The surface is undulating; the soil fertile, particularly the bottom lands in the river valleys.

Corn, wheat, tobacco, grapes, and pork are the chief products. Agricultural implements, and cotton and woolen goods are extensively manufactured.

19. *Columbus*, on the Scioto, is the capital. *Cincinnati*, on the

Ohio, is the largest city. It has extensive manufactures and a large commerce. *Cleveland,* on Lake Erie, is next in importance and the leading lake port. *Toledo,* on the Maumee, *Dayton, Springfield,* and *Sandusky* are thriving cities.

20. **Indiana** lies west of Ohio, and extends from the Ohio River to Lake Michigan. The Wabash forms part of the western boundary.

The surface is mostly level or gently rolling. The western part consists largely of fertile prairies. The products are similar to those of Ohio.

Indianapolis, the capital, is situated on the White River, and is an important railroad center. *Evansville,* on the Ohio, *Terre Haute,* on the Wabash, *Richmond,* in the eastern part of the state, and *Fort Wayne,* on the Maumee, are thriving cities.

21. **Illinois** extends from the Wabash to the Mississippi, and from the lower Ohio to Lake Michigan. It is a level or undulating plain. A large portion of the state consists of prairies. The state ranks first in the production of corn and wheat.

Springfield, in the central part, is the capital. *Chicago,* on Lake Michigan, is the largest grain and lumber market in the world. *Quincy,* on the Mississippi, and *Peoria,* on the Illinois, are cities of much importance.

22. **Michigan** consists of two peninsulas. The northern peninsula lies between Lake Superior and Lake Michigan; the southern, between Lake Michigan and Lake Huron.

Farming is carried on chiefly in the southern part of the state. There are rich copper and iron mines on the shores of Lake Superior.

Lansing, on Grand River, is the capital. *Detroit,* on the Detroit River, and *Grand Rapids,* on the Grand, are the largest cities. *Ann Arbor* is the seat of the University of Michigan.

23. **Wisconsin** extends from Lake Michigan to the Mississippi and St. Croix rivers. In the north, it borders on Lake Superior. The surface is generally undulating. The northern part is covered with extensive forests; the southern part is most thickly settled. Agriculture and lumbering are the chief occupations.

Madison, the capital, is beautifully situated between two small lakes. *Milwaukee,* on Lake Michigan, is a large commercial city.

QUESTIONS.—17. *Kentucky:* Bound it. Where are the Cumberland Mountains? Name the principal rivers of the state. Into what river do they empty? What are the chief products? What is the capital? On what river is it situated? Where is Lexington? Louisville?

18. *Ohio:* Bound it. Describe the surface. What rivers empty into the Ohio? Into Lake Erie? What are the chief products? The manufactured articles?

19. What is the capital? On what river is it situated? Where is Cincinnati? Dayton? Cleveland? Sandusky? Toledo? Springfield?

20. *Indiana:* Bound it. Describe the boundary. The principal rivers. What is the capital? On what river is it situated? Where is Evansville? Terre Haute? Richmond? Fort Wayne?

21. *Illinois:* Bound it. Describe the surface. The principal rivers. In the production of what staples does it rank first? What is the capital? Where is Chicago? Quincy? Peoria?

22. *Michigan:* Bound the northern peninsula. The southern. Describe the principal rivers. Where is farming chiefly carried on? What mines near Lake Superior? What is the capital? On what river is it situated? Where is Ann Arbor? Detroit? Grand Rapids?

23. *Wisconsin:* Bound it. Describe the surface. The principal rivers. What is the chief occupation? What is the capital? Where is Milwaukee?

MAP DRAWING.

MAP OF THE NORTH CENTRAL STATES.

East of the Mississippi.

1. Draw six horizontal and six vertical lines, as in the annexed sketch. You thus obtain a figure divided into twenty-five squares.

2. Points A, D, M, and N are found by dividing the sides of squares into halves.

3. Points B and O are at the corners of squares.

4. Point C, which marks the River St. Mary, and points I, K, and L are found by dividing the sides of squares into thirds.

5. Points E and G are found by dividing the sides of squares into fourths.

6. Point F is at the center of a square, and is near the western extremity of Lake Erie.

7. To find point H, draw through I a line parallel to the vertical lines of the figure, and extend it above I two thirds the side of a square.

8. Connect the several points found by straight lines in the order of lettering, and you have the fundamental figure of this section.

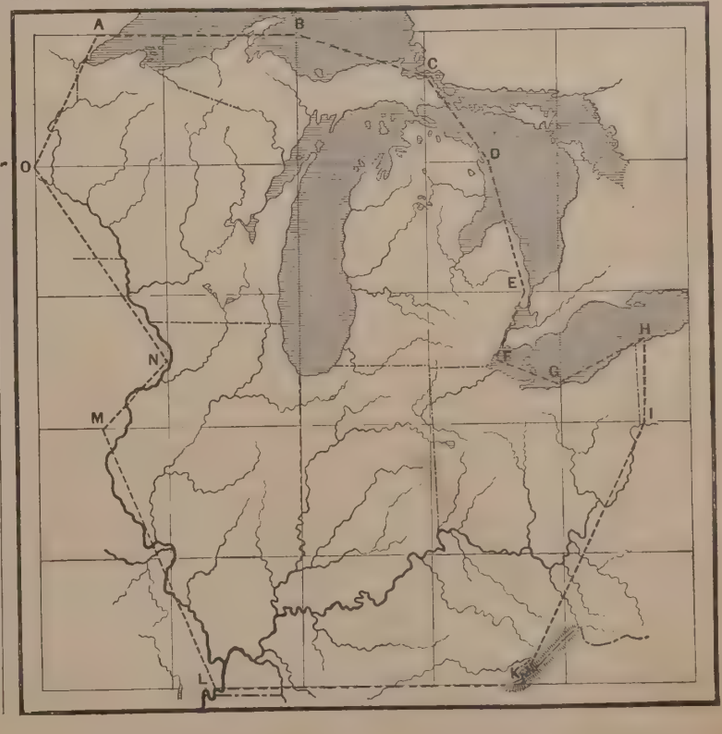
9. The lines from A to H roughly mark the shores of the lakes bounding the section on the north and north-east. In the same manner the lines HI and IK mark the eastern, boundary. KL marks the southern boundary; the lines from O to L mark the course of the Mississippi River; and the line AO, marks the north-western boundary of Wisconsin.

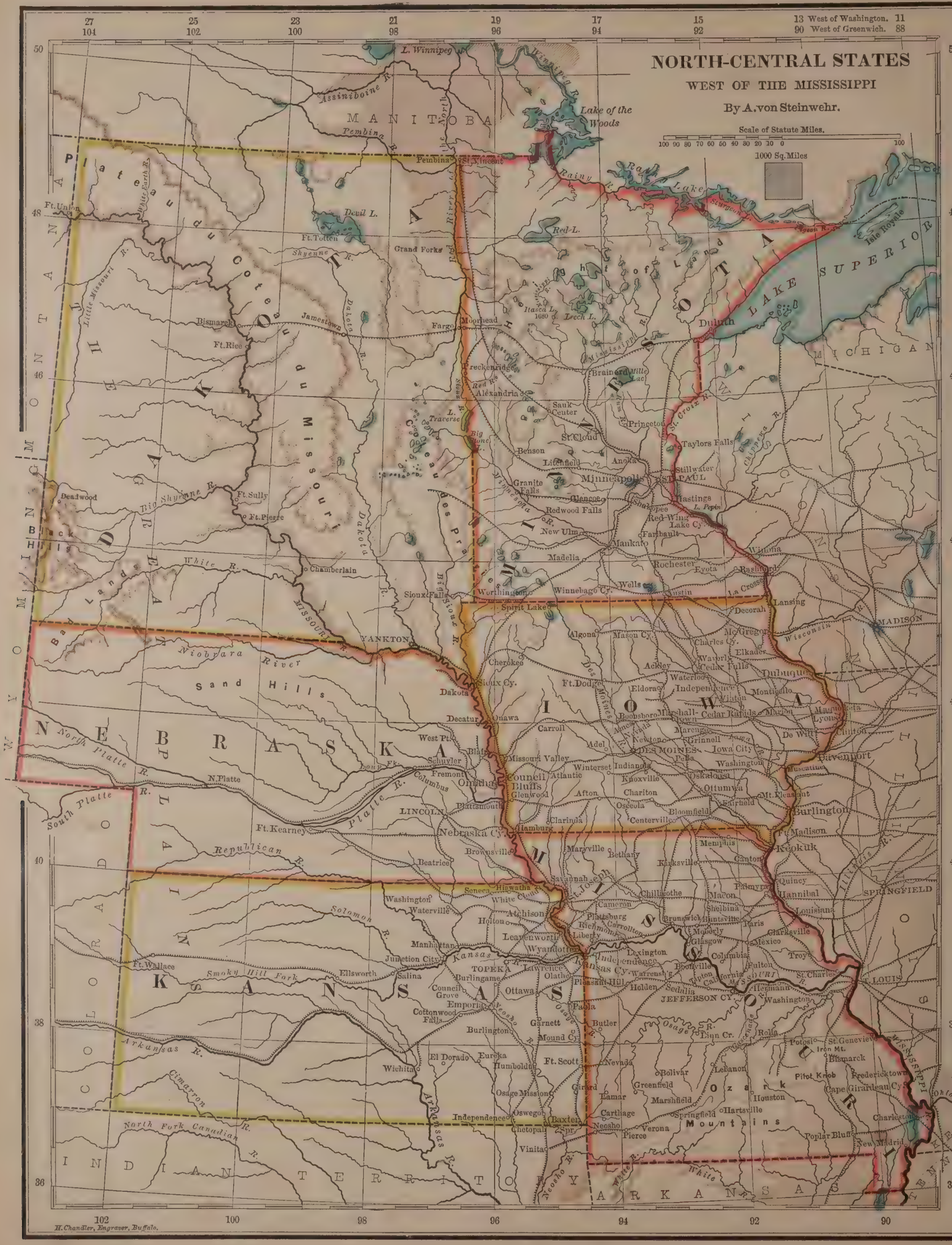
10. Draw the actual boundary line of the section and of Lake Michigan, and the boundary lines between the states.

11. The eastern and western boundaries of Ohio are not exactly parallel with the vertical lines of the figure. The northern boundary of Illinois is one fifth the side of a square below the fourth horizontal line, and the boundary between Ohio and Michigan is three fifths the side of a square below the same line. The southern boundary of Kentucky is identical with the line KL, except for a very short distance at its western extremity.

12. Draw the Cumberland Mountains, the principal rivers, and lakes; locate the chief cities, and letter the map.

13. The length of the side of a square in the figure is about 150 miles. Therefore, from the most northern point of Michigan to the southern boundary of Kentucky is about 750 miles, and the average width of the section is about 450 miles.




NORTH-CENTRAL STATES
WEST OF THE MISSISSIPPI
By A. von Steinwehr.
Scale of Statute Miles.
100 90 80 70 60 50 40 30 20 10 0 100
1000 Sq. Miles
27 104
25 102
23 100
21 98
19 96
17 94
15 92
13 West of Washington. 11
90 West of Greenwich. 88
50
48
46
44
42
40
38
36
MANITOBA
L. Winnipeg
Assiniboine R.
Lake of the Woods
Pembina R.
Pembina
St. Vincent
Rainy R.
Rainy Lake
Sturgeon R.
Pigeon R.
Isle Royale
Ft. Union
Devil L.
Red L.
Ft. Totten
Grand Forks
Shyenne R.
Red River
Height of Land
Mississippi R.
Hasca Ly 1680
Leech L.
Duluth
LAKE SUPERIOR
MICHIGAN
Bismarck
Jamestown
Fargo
Moorhead
Ft. Rice
Little Missouri R.
White Earth R.
Brainerd
Crow Wing R.
Red R.
Alexandria
Sauk Center
Princeton
St. Croix R.
Chippewa R.
L. Traverse
Big Stone L.
St. Cloud
Taylors Falls
Benson
Litchfield
Anoka
Stillwater
Minneapolis
ST. PAUL
Granite Falls
Glencoe
Shakopee
Hastings
L. Pepin
Deadwood
Big Shyenne R.
Ft. Sully
Redwood Falls
Red Wing
Lake Cy
Ft. Pierre
Minnesota R.
New Ulm
Farbault
Mankato
Winona
Black Hills
Madelia
Rochester
Eyota
Rushford
White R.
Chamberlain
Wells
Austin
La Crosse
Sioux Falls
Big Sioux R.
Worthington
Winnebago Cy.
Lansing
Spirit Lake
Decorah
MADISON
Missouri R.
YANKTON
Algona
Mason Cy.
McGregor
Charles Cy.
Waverly
Elkader
Niobrara River
Cherokee
Ackley
Cedar Falls
Dubuque
Sand Hills
Sioux Cy.
Ft. Dodge
Waterloo
Eldora
Independence
Montecello
Dakota
Des Moines R.
Boonsboro
Marshall-town
Cedar Rapids
Marion
Lyons
Decatur
Onawa
Carroll
Newton
Grinnell
De Witt
Clinton
West Pt.
Adel
Marengo
Iowa City
Blair
Schuyler
Missouri Valley
DES MOINES
Peria
Washington
Davenport
Winterset
Indianola
Muscatine
Fremont
Omaha
Council Bluffs
Atlantic
Knoxville
Oskaloosa
N. Platte
Columbus
Glenwood
Afton
Chariton
Ottumwa
Mt. Pleasant
Platte R.
LINCOLN
Plattsmouth
Osceola
Fairfield
Burlington
South Platte R.
Ft. Kearney
Clarinda
Bloomfield
Centerville
Nebraska Cy.
Hamburg
Madison
Maryville
Memphis
Keokuk
Republican R.
Browns ville
Bethany
Kirksville
Canton
Beatrice
Savannah
Quincy
Seneca
Hiawatha
Palmyra
Hannibal
SPRINGFIELD
Washington
White Clay R.
Chillicothe
Macon
Waterville
Cameron
Sheldina
Louisiana
Solomon R.
Atchison
Platsburg
Brunswick
Huntsville
Holton
Carrollton
Paris
Leavenworth
Liberty
Moberly
Clarksville
Manhattan
Wyandotte
Glasgow
Mexico
Lexington
Columbia
Troy
Junction City
Kansas R.
Independence
Boonville
Fulton
Ft. Wallace
TOPEKA
Lawrence
Kansas Cy.
Warrensb'g
Jefferson Cy.
St. Charles
Smoky Hill Fork
Ellsworth
Salina
Olathe
Pleasant Hill
Holden
Sedalia
LOUIS
Burlingame
Council Grove
Ottawa
Hermann
Emporia
Paola
JEFFERSON CY.
Washington
Cottonwood Falls
Osage R.
Garnett
Butler
Burlington
Mound Cy.
Osage R.
Linn Cr.
Rolla
Arkansas R.
Potosi
St. Genevieve
Iron Mt.
Bismarck
El Dorado
Eureka
Humboldt
Ft. Scott
Nevada
Bolivar
Lebanon
Pilot Knob
Fredericktown
Wichita
Greenfield
Ozark
Houston
Cape Girardeau Cy.
Osage Mission
Girard
Lamar
Marshfield
Ohio R.
Cimarron
Carthage
Springfield
Hartsville
Independence
Oswego
Baxter Spr.
Neosho
Verona
Mountains
Charleston
North Fork Canadian R.
Chetopah
Pierce
Poplar Bluff
New Madrid
Arkansas R.
Vinita
Neosho R.
White R.
White
INDIAN TERRITORY
ARKANSAS
102
100
98
96
94
92
90
H. Chandler, Engraver, Buffalo.

THE NORTH CENTRAL STATES,

WEST OF THE MISSISSIPPI.

MAP QUESTIONS.—What waters on the northern boundary of this section? What great river on the east? What two meridians on the west? What parallels on the south?

What mountains in western Dakota? What mountain range crosses Missouri? What portion of this section is lowland?

What river separates Minnesota from Dakota? In what direction does the Red River of the North flow? What tributary of the Mississippi on the eastern boundary of Minnesota? What other tributary flows through Minnesota? In what lake does the Mississippi rise?

Name the two largest rivers flowing through Iowa. What great tributary of the Mississippi crosses this section from north-west to south-east? Name the two largest northern tributaries of the Missouri. What large river flows through Nebraska? Name the two largest rivers of Kansas. Name two tributaries of the Missouri in Missouri.

On which of the Great Lakes does Minnesota border? What lake in northern Dakota? Name some lakes in northern Minnesota.

Name the six states and territories of this section. What three border on the Mississippi? What four border on the Missouri? Which are the two northern? Which two the middle? Which two the southern?

Bound Minnesota. What is the capital? On what river is St. Paul situated? What two lakes on the western boundary? What river is the outlet of Lake Traverse? Of Big Stone Lake?

Bound Dakota. What is the capital? On what river is Yankton situated?

Bound Nebraska. What is the capital? In what part of the state is it situated? Name the largest town on the Missouri. What town in Iowa opposite Omaha?

Bound Iowa. What is the capital? On what river is Des Moines situated? Name the two principal towns on the Mississippi.

Bound Missouri. What is the capital? On what river is Jefferson City situated? What city on the Mississippi south of the mouth of the Missouri? What city on the Missouri near the western boundary of the state?

Bound Kansas. What is the capital? On what river is Topeka situated? What part of the state appears, from the map, to be most densely settled?

DESCRIPTION.

I. POSITION.

1. This section extends from the Mississippi to the meridians of 102° and 104°. The northern boundary is formed by the Pigeon River, which empties into Lake Superior, Rainy Lake, Rainy River, the Lake of the Woods, and the parallel of 49°. The southern boundary is formed by the parallels of 36° 30′ and 37°.

2. This section includes five states: Missouri, Iowa, Minnesota, Kansas, and Nebraska; also, the territory of Dakota. Each of these political divisions is considerably larger than Pennsylvania.



Plowing on a Prairie.

QUESTIONS.—1. What river bounds this section on the east? What meridians on the west? Describe the northern boundary. The southern boundary.—2. Name the five states of this section. The territory. What is said of the size of these divisions as compared with Pennsylvania?

3. What part of this section is a low plain? Where are the Great Plains? Describe them.—4. Where are the Black Hills?—5. Where are the Ozark Mountains? Describe them.—6. Where are the Bad Lands?

II. SURFACE.

3. The eastern part of this section occupies the low plain of the Mississippi; the western extends over the Great Plains. These plains form a table-land, which slopes gently from the base of the Rocky Mountains to the Mississippi plain.

4. The surface of the Great Plains is in many places diversified by mountains and hills. The highest are the Black Hills, in western Dakota. They form a mountain group, occupying the region between the two forks of the Big Shyenne River. Some of the peaks are more than 8000 feet high.

5. The *Ozark Mountains* cover nearly half of the state of Missouri, south of the Missouri River. They are very broken in the east, but in the west take the form of a table-land.

6. The *Bad Lands* are an extensive basin in south-western Dakota and western Nebraska. They are composed of sand and clay, and are traversed by ravines formed by the action of water.

III. RIVERS AND LAKES.

7. The *Mississippi* rises in Lake Itasca, which is situated in northern Minnesota. Near Minneapolis the river forms the picturesque Falls of St. Anthony. A large number of small lakes in Minnesota are drained by the Mississippi.

8. Most of the rivers of this section are tributaries of the Mississippi. The *Missouri* flows in a very crooked course from north-west to south-east. It crosses Dakota, forms the boundary between Iowa and Nebraska, then between Kansas and Missouri, and at last crosses the last named state from west to east. It empties into the Mississippi north of St. Louis.

9. The western tributaries of the Missouri are: the *Osage,* in Missouri; the *Kansas,* in Kansas; the *Platte,* in Nebraska; and the *Big Shyenne,* in Dakota.

The eastern tributaries are: the *Big Sioux,* forming part of the boundary between Dakota and Iowa; and the *Dakota,* flowing through the territory of Dakota from north to south.



Crossing a Portage.

10. The principal tributaries of the Mississippi are: the *Minnesota,* in Minnesota; the *Iowa* and *Des Moines,* which traverse Iowa.

The *St. Croix* forms part of the boundary between Minnesota and Wisconsin.

11. The *Red River of the North* flows between Minnesota and Dakota, and empties into Lake Winnipeg, in British America. The *Devil Lake,* in Dakota, is drained by the *Shyenne,* one of the tributaries of this river.

12. *Lake Superior* washes the north-eastern boundary of Minnesota. *Crooked Lake, Rainy Lake,* and the *Lake of the Woods* are on the northern boundary of this state.

IV. CLIMATE AND VEGETATION.

13. The climate of this section is marked by great extremes. The winters are severe; the summers, warm, particularly in the southern part.

14. Extensive pine forests cover the region from Lake Superior to Red Lake, in Minnesota, and yield large quantities of lumber. The head-waters of the Mississippi are surrounded by forests of deciduous trees. By far the greater part of this section consists of *prairies.* The Great Plains have an arid climate, and are well adapted for grazing, but not for tillage.

V. INHABITANTS AND OCCUPATIONS.

15. The population consists of emigrants from the older states and Europe, especially from Germany. Some Indian tribes live in the western and northern parts.

16. Mining and agriculture are the principal occupations. The mines yield *iron, lead,* and *coal.*

Agriculture is pursued mainly in the river valleys. Corn, wheat, oats, hemp, and potatoes are the staple products.

QUESTIONS.—7. Where does the Mississippi rise? What is its course? What falls does it form?—8. Describe the course of the Missouri. Where does it empty into the Mississippi?—9. Where is the Osage? The Kansas? The Platte? The Big Shyenne? In what mountains does it rise? Where is the Big Sioux? Describe its course. Describe the Dakota.

10. Describe the Minnesota. The Iowa. The Des Moines. The St. Croix.—11. Describe the Red River of the North. Into what lake does it empty? Where is Devil Lake? What river is its outlet?—12. Where is Lake Superior? Crooked Lake? Rainy Lake? Lake of the Woods?

13. What is said of the climate?—14. What region is covered with extensive pine forests? Where are forests of deciduous trees? What is said of the prairies?

15. Of what does the population of this section consist?—16. What are the principal occupations? Name the mineral products. Where is agriculture carried on? Name the chief agricultural staples.

VI. STATES AND CITIES

17. **Missouri** lies west of Illinois, and includes the lower course of the Missouri. The Ozark Mountains cover the southern part of the state.

The south-eastern part is low and marshy. The bottom lands of the rivers are very fertile, much more so than the uplands.

Iron, lead, and other metals occur in great quantities. The *Iron Mountain* and *Pilot Knob* consist almost entirely of rich iron ore.

18. *Jefferson City,* on the Missouri, is the capital. *St. Louis,* on the Mississippi, south of the mouth of the Missouri, is the largest city. It is the center of commerce on the upper Mississippi, and is rapidly increasing in wealth and population.

St. Joseph and *Kansas City,* both on the Missouri, *St. Charles,* north-west of St. Louis, and *Hannibal,* on the Mississippi, are flourishing towns.

19. **Iowa** lies north of Missouri, and extends from the Mississippi on the east to the Missouri on the west. Most of the state is occupied by rolling, fertile prairies, watered by magnificent streams.

Belts of forests occur near all the rivers. The soil is fertile; hence, agriculture is the main occupation. Lead mines are worked near Dubuque on the Mississippi.

20. *Des Moines,* on the Des Moines River, is the capital, and the largest city, *Dubuque,* is on the Mississippi. *Iowa City,* on the Iowa River, *Burlington, Davenport,* and *Keokuk* are flourishing towns.

21. **Minnesota** lies north of Iowa. On the east it borders on Lake Superior, the Mississippi, and the St. Croix; on the west, on the Red River of the North.

The northern part of the state is diversified by a large number of beautiful lakes. One of these, Lake Itasca, is the source of the Mississippi. Agriculture and lumbering are the chief occupations.

St. Paul, on the Mississippi, is the capital and chief commercial city. *Minneapolis,* at the Falls of St. Anthony, has extensive manufacturing interests.

22. **Kansas** lies west of Missouri. It consists chiefly of rolling prairies. There are no mountains in this state. The river valleys are fertile. Stock-raising and farming are the chief occupations. The climate and soil are well adapted to the growth of fine fruits.

The Kansas, formed by the Republican Fork and the Smoky Hill Fork, and the Arkansas, are the principal rivers.

Topeka, on the Kansas, is the capital. *Leavenworth* and *Atchison,* on the Missouri, *Lawrence,* on the Kansas, and *Fort Scott,* in the south-eastern part of the state, are thriving towns.



Duck Hunting in Minnesota.

23. **Nebraska** lies west of Iowa, and north of Kansas. Most of the state is occupied by rolling prairies, which afford fine pasturage. The bottom-lands of the Missouri are fertile.

South of the Niobrara River is the extensive tract of the Sand Hills, formerly a favorite range of the bison and the antelope.

Lincoln is the capital. *Omaha,* on the Missouri, is the chief commercial city, and is growing rapidly.

24. **Dakota Territory** lies north of Nebraska and west of Minnesota. This large territory is composed chiefly of rolling prairie land. A portion of the territory is rugged and not fitted for cultivation.

The *Black Hills* extend into the western part, between the two forks of the Big Shyenne River. The valley of the Missouri River is quite fertile.

Furs and peltries are obtained in large quantities. Agriculture and stock-raising are the chief occupations.

Yankton, on the Missouri, is the capital. *Pembina,* on the Red River of the North, is a thriving town.

QUESTIONS.—17. *Missouri:* Bound it. What part is covered by the Ozark Mountains? Name the principal rivers. Where are Iron Mountain and Pilot Knob?

18. What is the capital? On what river is Jefferson City situated? Where is St. Louis? St. Joseph? Kansas City? St. Charles? Hannibal?

19. *Iowa:* Bound it. Describe the surface. What rivers bound this state? What rivers flow through it? What is the chief occupation of the inhabitants?

20. What is the capital? On what river is Des Moines situated? Where is Iowa City? Dubuque? Burlington? Davenport? Keokuk?

21. *Minnesota:* Bound it. Describe the surface. Name the principal rivers. What are the chief occupations of the people? What is the capital? On what river is St. Paul situated? Where is Minneapolis?

22. *Kansas:* Bound it. Describe the surface. Name the principal rivers. What are the chief occupations? What is the capital? On what river is it situated? Where is Leavenworth? Atchison? Lawrence? Fort Scott?

23. *Nebraska:* Bound it. Describe the surface. Name the principal rivers. What part of the state is fertile? What is the capital? In what part of the state is Lincoln situated? Where is Omaha?

24. *Dakota:* Bound it. Describe its surface. Where are the Black Hills? Name the chief rivers. The occupations. What is the capital? On what river is Yankton situated? Where is Pembina?

MAP DRAWING.

MAP OF THE NORTH CENTRAL STATES,

West of the Mississippi.

1. Draw five horizontal and five vertical lines, as in the annexed sketch. You thus construct a square, divided into sixteen small squares.

2. Points A and B are the upper corners of the large square. Point C is two thirds the side of a square below the top line. Points D and E are the centers of the sides of a square.

3. Point F is found by trisecting the side of a square. Point G is the right-hand lower corner of the large square.

4. Point H is the center of the side of a square. Point K is found by trisecting the side of a square. Draw a vertical line through H, and a horizontal line through K; point I is at their intersection.

5. The line A B marks the northern boundary of Dakota, and partly the northern boundary of Minnesota. The line B C marks the northern shore of Lake Superior.

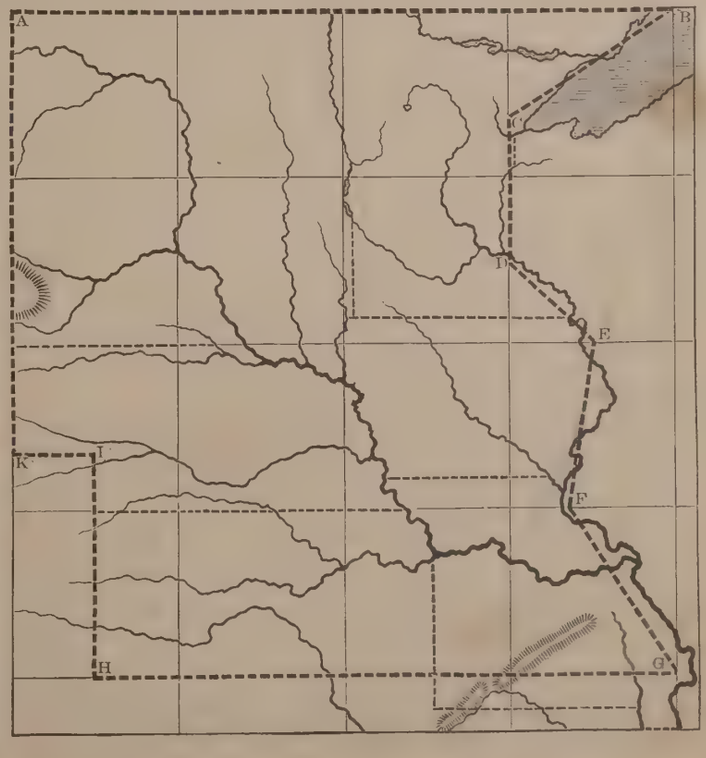
6. The line C D roughly marks the boundary of Minnesota from the St. Louis River to the Mississippi, and the course of the St. Croix.

7. The lines D E, E F, and F G roughly mark the Mississippi, forming the eastern boundary of Minnesota, Iowa, and Missouri.

8. The eastern part of the southern boundary of Missouri is about one third the side of a square below the bottom line of the large square; the western part of this boundary, about one sixth.

9. Draw the principal rivers and the boundaries of the states. Draw the Black Hills in the fork of the two branches of the Big Shyenne River, and the Ozark Mountains in southern Missouri. Locate the principal towns, and letter the map.

10. The length of one side of a small square is about 210 miles. Hence, the distance from the northern boundary of Dakota to the southern is nearly 420 miles. From the northern boundary of Nebraska to the southern boundary of Kansas is the same distance.




MAP OF THE
SOUTH CENTRAL STATES.
By A.von Steinwehr.
H. Chandler, Engraver, Buffalo.
PUBLIC LAND
INDIAN TERRITORY
CHEYENNES AND ARRAPAHOES
CHEROKEE COUNTRY
CREEK COUNTRY
CHICKASAW NATION
SEMINOLES
CHOCTAW NATION
TEXAS
MEXICO
KANSAS
MISSOURI
ARKANSAS
LOUISIANA
MISSISSIPPI
TENNESSEE
KENTUCKY
ALABAMA
GULF OF MEXICO
Llano Estacado
(barren Table land)
Rocky Mts.
Apache Mts.
Sierra Madre
Sierra del Muerto
Sierra Santiago
Guadalupe Mts.
Mts.
Ozark
Washita Mts.
Sans Bois Mts.
Red Fork
North Fork
Canadian R.
Arkansas R.
Verdigris R.
Neosho R.
Illinois R.
White R.
Red R.
Washita R.
Saline R.
Ouachita R.
Big Black R.
Yazoo R.
Pearl R.
Pascagoula R.
Tombigby R.
Tennessee R.
Cumberland R.
Mississippi R.
Pecos R.
Brazos R.
Colorado R.
Trinity R.
Neches R.
Sabine R.
Calcasieu R.
Rio Grande
Nueces R.
San Antonio R.
Guadalupe R.
R. Frio
Atchafalaya R.
Bayou Teche
Bayou Lafourche
Lake Pontchartrain
Lake Borgne
Mississippi Sound
Galveston Bay
Corpus Christi Pass
Aransas B.
Matagorda B.
Marsh I.
Padre Island
Brazos de Santiago
Matamoras
Brownsville
Rio Grande Cy.
Laredo
Eagle Pass
Presidio
Ft. Clark
Ft. Quitman
Ft. Davis
San Elizario
El Paso
Ft. Union
Ft. Buscom
Anton Chico
Ft. Arbuckle
Ft. Washita
Ft. Gibson
Ft. Davis
Ft. Smith
Ft. Huntsville
Fayetteville
Bentonville
Pocahontas
Batesville
Jonesboro
Jacksonport
Osceola
Augusta
Searcy
Clarksville
Dardanelle
Lewisburgh
Madison
Memphis
Grand Jct.
Hernando
Corinth
Holly Springs
Ripley
Boonville
Helena
Friars Point
Oxford
Tupelo
Okolona
Houston
Aberdeen
Grenada
West Point
Carrollton
Starkville
Columbus
Macon
Kosciusko
De Kalb
Meridian
Canton
Vicksburg
Jackson
Brandon
Port Gibson
Crystal Spgs.
Rodney
Hazlehurst
Natchez
Brookhaven
Woodville
Liberty
Clinton
Amite
Covington
Handsboro
Pass Christian
Pascagoula
Waldron
Little Rock
Hot Springs
Dallas
Arkadelphia
Pine Bluff
Devalls Bluff
Helena
Waco
Marlin
Centreville
Owensville
Hearne
Huntsville
Crockett
Homer
Alexandria
Marksville
Natchitoches
Nacogdoches
Palestine
Rusk
Jacksonville
Tyler
Henderson
Athens
Carthage
Mansfield
Harrisonburg
Vidalia
Delta
Columbia
Monroe
Bastrop
Bellevue
Minden
Shreveport
Jefferson
Marshall
Kaufman
Quitman
Dallas
Sulphur Spr.
Mc Kinney
Denton
Gainesville
Henrietta
Sherman
Denison City
Bonham
Paris
Clarksville
Texarkana
Lewisville
Magnolia
El Dorado
Hamburg
Camden
Monticello
Hampton
Washington
Greenville
Carrollton
Starkville
Columbus
Macon
Kosciusko
Yazoo Cy
Canton
Vicksburg
Jackson
Brandon
Meridian
Round Top
Palo Pinto
Ft. Worth
Clebarne
Waxahatchie
Hillsboro
Caddo Pks.
Table Mt.
Comanche
Meridian
Fairfield
Palestine
Rusk
Nacogdoches
Natchitoches
Natchez
Brookhaven
Woodville
Liberty
Clinton
Amite
Covington
Handsboro
Pass Christian
Pascagoula
Menardville
Georgetown
Cameron
Hearne
Huntsville
Bryan
Prairie Plains
Navasota
Hempstead
Brenham
La Grange
Bastrop
Austin
Fredericksbg
San Marcos
Lockhart
Columbus
Belleville
Houston
Liberty
Orange
Beaumont
Newton
Woodville
Livingston
Washington
Opelousas
Vermillion V.
St. Martins V.
Plaquemine
Donaldson V.
Baton Rouge
New Orleans
Lake Pontchartrain
Lake Borgne
Mississippi Sound
Franklin
Brashear
Thibodeaux
Marsh I.
Atchafalaya B.
Galveston
Sabine City
Sabine
Calcasieu
Brazoria
Matagorda
Port Lavaca
Victoria
Goliad
Helena
Whaston
Richmond
Columbia
San Antonio
N. Braunfels
Seguin
Gonzales
Castroville
Oakville
Indianola
S. Patricio
Corpus Christi
Nueces R.
R. Frio
San Antonio R.
Guadalupe R.
Colorado R.
Brazos R.
Trinity R.
Neches R.
Sabine R.
Calcasieu R.
Red R.
Washita R.
Saline R.
Ouachita R.
Big Black R.
Yazoo R.
Pearl R.
Pascagoula R.
Tombigby R.
Tennessee R.
Cumberland R.
Mississippi R.
Arkansas R.
White R.
Illinois R.
Verdigris R.
Neosho R.
Canadian R.
North Fork
Red Fork
Sulphur Fork
Washita R.
Sans Bois Mts.
Mts.
Ozark
Rocky Mts.
Apache Mts.
Sierra Madre
Sierra del Muerto
Sierra Santiago
Guadalupe Mts.
Pecos R.
Brazos R.
Colorado

THE SOUTH CENTRAL STATES.

Lat. 38°

MAP QUESTIONS.—What three states bound this section on the north? On what gulf does it border? What river on the south-west? From what country does the Rio Grande separate this section? Name the principal bays on the gulf between the mouth of the Rio Grande and the delta of the Mississippi.

What mountains in the western part of this section? To what system do the Apache and Guadalupe Mountains belong? What portion of this section is a low plain? What portion is a table-land?

What great river flows through the eastern part of this section? Name one of the eastern tributaries of the Mississippi. Name its two largest western tributaries. What is the course of the Arkansas? Name two tributaries of the Arkansas. What river empties into the Mississippi north of the Arkansas? What river north of the Red River? What river on the boundary between Louisiana and Texas? What river empties into Galveston Bay?

What river empties into the Gulf of Mexico, west of the Bay of Galveston? What river empties into Matagorda Bay? What river empties into the Laguna Madre? What river forms the boundary between Texas and Mexico? What is the largest tributary of the Rio Grande? What sound east of the Mississippi delta? What river empties into the Mississippi Sound?

Name the four states of this section. The territory. What states border on the Mississippi River? Through what state does the Arkansas flow?

Bound Mississippi. What is the capital? On what river is it situated? What city on the Mississippi west of Jackson? What city on the Mississippi further south?

Bound Louisiana. What is the capital? Where is it situated? What city on the eastern bank of the Mississippi below Baton Rouge?

Bound Arkansas. What is the capital? Where is it situated?

Bound Texas. What is the capital? On what river is Austin situated? What sea-port on Galveston Bay? What city north-west of Galveston Bay? What city south-west of Austin? What city on the lower Rio Grande?

Bound Indian Territory.

DESCRIPTION.

I. POSITION.

1. This section includes the southern part of the Mississippi Valley and of the barren plateau east of the Rocky Mountains, known as the Great Plains. It is bounded on the south by the Rio Grande and the Gulf of Mexico.

2. The following bays extend from the Gulf of Mexico: *Sabine Bay*, between Louisiana and Texas; *Galveston Bay*, *Matagorda Bay*, *Aransas Bay*, and *Laguna Madre*, in Texas. The *Mississippi Sound* is east of the Delta of the Mississippi River.

II. SURFACE.

3. The south-eastern portion is a low plain. The coast is but little elevated above the level of the sea. The ground rises gently toward the north and west. The plateau in the west is the southern part of the Great Plains.

The *Llano Estacado*, in western Texas, is the highest section of these plains.

4. The most southern ranges of the *Rocky Mountain* system occupy western Texas between the Rio Grande and the Pecos.

The *Ozark Mountains* trend through north-western Arkansas.

III. RIVERS AND LAKES.

5. The *Mississippi River* flows through the eastern part of this section. Arkansas, Mississippi, and Louisiana border upon it.

The *Delta* of the Mississippi extends from the mouth of the Red River to the Gulf of Mexico. It is a low and swampy plain, through which flow many branches of the great river, called *bayous*.

In the spring, when the snow melts in the northern part of the Mississippi Valley, the water rises rapidly from thirty to forty feet. To protect the country from inundation, embankments, called *levees*, have been constructed for a long distance above and below New Orleans.

6. The principal tributaries of the Mississippi in this section are the Yazoo, from the east; the White, Arkansas, Washita, and Red rivers, from the west.

The *Yazoo* is a deep and sluggish stream. The country lying between this river and the Mississippi contains extensive swamps. The *White River* rises in north-western Arkansas. Its mouth is near that of the Arkansas River.

The *Arkansas* rises in the Rocky Mountains, and flows through Colorado, Kansas, Indian Territory, and Arkansas. The *Washita* flows through Arkansas and Louisiana.

The *Red River* rises in the Llano Estacado, forms the boundary between Indian Territory and Texas, and flows through south-western Arkansas and Louisiana.

7. Most of the rivers of Texas have a south-easterly course, and rise near the margin of the Llano Estacado.

The *Sabine* forms the boundary between Louisiana and Texas. The *Trinity* empties into Galveston Bay; the *Brazos*, into the Gulf of Mexico; the *Colorado*, into Matagorda Bay; and the *Nueces*, into the Laguna Madre.

The *Rio Grande* rises in the Rocky Mountains and forms the boundary between Texas and Mexico. The *Pecos* is its principal tributary.

QUESTIONS.—1. What regions are included in this section? What river and what gulf bound it on the south?—2. Where is Sabine Bay? Galveston Bay? Matagorda Bay? Aransas Bay? Laguna Madre?

3. What part of this section is a low plain? What part is a plateau? Where is the Llano Estacado?—4. Where are the southern ranges of the Rocky Mountains? Where are the Ozark Mountains?

5. Describe the course of the Mississippi in this section. Describe the extent of the Delta of the Mississippi.—6. Where is the Yazoo? White River? Describe the Arkansas. The Washita. Red River.—7. Describe the Sabine. The Trinity. The Brazos. The Colorado. The Nueces. The Rio Grande. The Pecos.



Burning a Canebrake in Arkansas for Game.

IV. CLIMATE AND VEGETATION.

8. The climate of this section is very warm, like that of the South-eastern States. The eastern part is quite moist and has abundant rain; the western is arid and barren.

9. The lowlands of this section generally have a very fertile soil, and are covered with magnificent forests of deciduous trees. In the southern part, evergreen trees, magnolias, and live-oaks grow abundantly. The coasts are covered with extensive swamps and canebrakes.

10. Eastern Texas and north-western Louisiana consist of prairies. The higher regions in the west and north-west, are sterile, in many localities resembling deserts. The Llano Estacado, or Staked Plain, is often called the American Desert.

V. INHABITANTS AND OCCUPATIONS.

11. This section has been settled mainly by emigrants from the eastern states and from Europe. There are many descendants of the early Spanish colonists in Texas, and of the early French colonists in Louisiana.

12. Agriculture is the chief occupation of the inhabitants. The products raised resemble those of the South-eastern States.

Cotton is extensively raised. Mississippi produces more of this staple than any other state in this section.

The sugar-cane is raised in Louisiana, Mississippi, and Texas. The richest sugar plantations lie on the banks of the Mississippi, in lower Louisiana. They yield most of the cane-sugar raised in the United States.

13. Indian corn is extensively cultivated in all the states of this section; wheat, in Texas, Arkansas, and Mississippi; and tobacco, in Louisiana. The western prairies of Texas are well adapted to cattle and sheep-raising.

QUESTIONS.—8. What is said of the climate of this section?—9. What is said of the vegetation of the lowlands?—10. What portion is covered with prairies? What is said of the more elevated regions?

11. By whom was this section settled?—12. What is the chief occupation? Where is cotton raised? The sugar cane?—13. Indian corn? Wheat? Tobacco? What prairies are adapted to sheep-raising?

VI. STATES AND CITIES.

This section includes four states: Mississippi, Louisiana, Arkansas, and Texas; also, the Indian Territory.

14. **Mississippi** lies between Alabama and the Mississippi River. On the south, it borders on Louisiana and the Mississippi Sound.

The soil of this state is very fertile. There is no tract of land that can not be profitably cultivated, except the cypress swamps lying between the Yazoo and Mississippi rivers.

15. *Jackson*, on Pearl River, is the capital. *Vicksburg*, near the mouth of the Yazoo, is the largest city, and an important cotton market. *Natchez* is an important town, situated upon a bluff on the Mississippi.

16. **Louisiana.**—The larger part of Louisiana lies west of the Mississippi. It includes the delta of this river, and is throughout a low and level country.

That part of the state which borders on the Mississippi is very fertile, and was formerly covered with dense forests. In the center, are prairies with a poor and sandy soil.

Sugar, cotton, and corn are the principal agricultural products. Oranges, peaches, and figs are the principal fruits.

17. *Baton Rouge*, the capital, situated on a bluff on the left bank of the Mississippi, is surrounded by large sugar and cotton plantations. *New Orleans* is the largest city. It is built on a bend of the Mississippi, and is, therefore, called the Crescent City. Sea-going vessels come up to its levee, although it is over 100 miles from the mouth of the Mississippi.

Donaldsonville, on the Mississippi, is a thriving river port. *Shreveport*, on the Red River, is the largest city in the western part of the state.

18. **Arkansas** lies west of the Mississippi, and extends from Louisiana on the south to Missouri on the north. The Arkansas River flows through it from north-west to south-east.

The part of the state near the Mississippi is low and marshy. The western part is more elevated, and hilly. In the north-west, are portions of the Ozark Mountains.

Cotton and corn are the principal staples.

Little Rock, on the Arkansas, is the capital. *Batesville,* on White River, and *Camden,* on the Washita, are flourishing towns. *Hot Springs* is a resort for invalids.

19. **Texas** is the largest state of the Union. It lies west of Louisiana and southern Arkansas, and south of the Indian Territory.

The Sabine forms part of the eastern boundary; the Rio Grande, part of the western.

20. The country rises gradually from the low plain on the gulf coast to the hilly table-land in the north and west.

The region between the Rio Grande and the Pecos is occupied by the most southern chains of the Rocky Mountains. The most important of them is known as the *Apache Mountains.*

21. The rivers of Texas flow from the north-west to the south-east, and their courses indicate the general slope of the country. With the exception of the Brazos, they empty into the bays along the coast.

22. Stock-raising and agriculture are the principal occupations of the people. Agriculture is carried on mostly in the eastern and central parts. Wheat, cotton, and Indian corn are the chief products. Panthers, bears, and deer inhabit the thinly settled regions.

23. *Austin,* on the Colorado, is the capital. *Galveston,* on a narrow island near Galveston Bay, is the commercial emporium. Its harbor is the best on the coast of Texas. *Houston,* west of Galveston Bay, is a thriving town. *Indianola,* on Matagorda Bay, and *Brownsville,* near the mouth of the Rio Grande, are seaports. *San Antonio* is one of the oldest cities in the Union. *Dallas,* in the northern part, is a flourishing city.

24. **Indian Territory.**—This territory lies north of Texas, west of Arkansas, and south of Kansas, and consists of undulating prairies and steppes. The river bottoms are fertile.

It has been set apart by the government to be occupied by several Indian tribes that formerly lived east of the Mississippi.

25. Each of the tribes has its own independent government. Some have made considerable progress in the arts of peace. They live in houses, cultivate the soil, raise domestic animals, and carry on some manufacturing.

QUESTIONS.—Name the four states and the territory of this section.

14. *Mississippi:* Bound it. Describe the surface. Name the principal rivers. What is said of the soil?—15. What is the capital? On what river is it situated? Where is Natchez? Vicksburg?

16. *Louisiana:* Bound it. Describe the surface. Name the principal agricultural products.—17. What is the capital? On what river is it situated? Where is Donaldsonville? Shreveport? New Orleans?

18. *Arkansas:* Bound it. Describe the surface. The principal rivers. Where are the Ozark Mountains? What are the principal staples? What is the capital? On what river is it situated? Where is Batesville? Camden? Hot Springs?

19. *Texas:* Bound it. What river bounds it on the east? On the south-west? On the north?—20. Describe the surface. Where are the Apache Mountains? To what system do they belong?—21. Name the principal rivers flowing through Texas. In what direction do they generally flow?—22. What are the chief occupations? Name the products.—23. What is the capital? On what river is it situated? Where is Galveston? Indianola? Brownsville? San Antonio? Dallas?

24. *Indian Territory:* Bound it. Describe the surface. What rivers flow through it? What people live in it?—25. What is said of the Indians?

MAP DRAWING.

MAP OF THE SOUTH CENTRAL STATES.

1. Draw four horizontal and five vertical lines, as in the annexed sketch. You thus obtain a figure divided into twelve small squares.

2. Find points A, B, and E by dividing the sides of the squares indicated into halves, and points D, I, and L by dividing the sides of their squares into thirds. C, P, G, and H are the corners of squares.

3. Through I, draw a line parallel with the horizontal lines, and through L, another, parallel with the vertical lines of the figure. Prolong these two lines until they meet, and their intersection will mark point K.

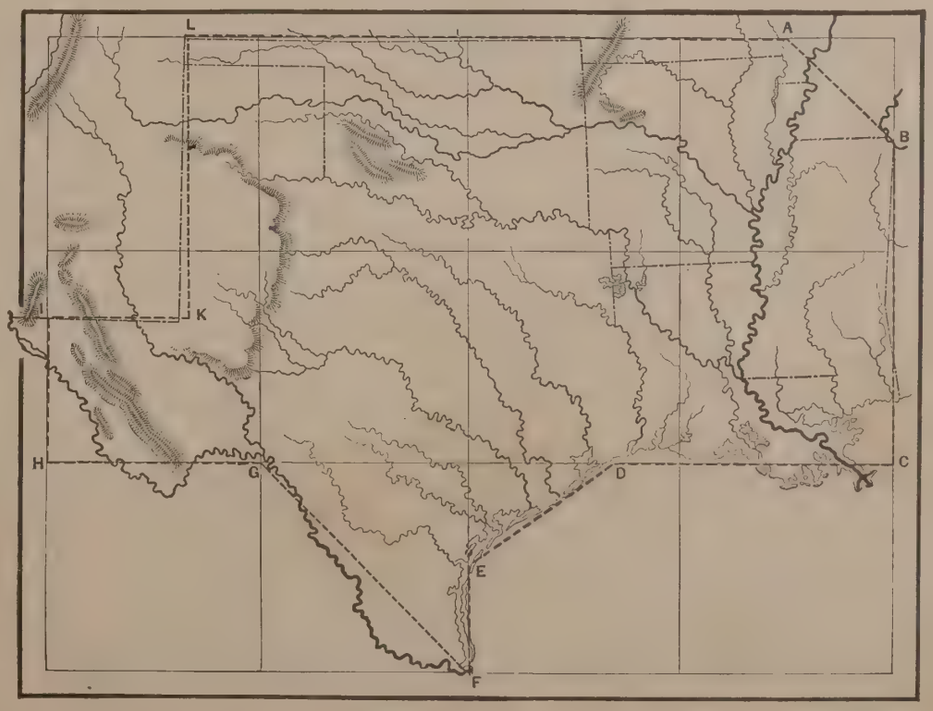
4. Connect the several points found by straight lines, in the order of the lettering, and you thus obtain the fundamental figure of the section.

5. The lines AB and BC roughly mark the eastern boundary line; CD, DE, and EF, the Gulf Coast; and FG, GH, and HI, the course of the Rio Grande River. The lines IK, KL, and LA are nearly identical with the actual boundaries which they locate.

6. Draw the actual boundary lines of the section and the boundary lines between the states.

7. Draw the principal rivers and mountain chains; locate the principal cities, and letter the map.

8. The side of a small square in the figure represents about 270 miles.




MAP OF THE
WESTERN STATES.
By A. von Steinwehr.
BRITISH COLUMBIA
CANADA
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
COLORADO
NEBRASKA
KANSAS
NEVADA
UTAH
ARIZONA
NEW MEXICO
TEXAS
CALIFORNIA
Great Basin
Great Salt Lake Desert
Great Plains Of The Columbia River (Sand Hills & Drift)
Sierra Nevada Mts.
Coast Range
Cascade Range
Rocky Mountains
Blue Mountains
Wasatch Mts.
Uinta Mts.
Colorado R.
Columbia R.
Missouri R.
Snake R.
Yellow Stone R.
Green R.
Rio Grande
Pacific Ocean
Gulf of California
LOWER CALIFORNIA
Mt. Head
Mt. Baker
Mt. Olympus
Mt. Rainier
Mt. St. Helens
Mt. Adams
Mt. Hood
Mt. Jefferson
Three Sisters
Diamond Pk.
Mt. Shasta
Crater Mt.
Lassens Pk.
Mt. Dana
Mt. Lyell
Mt. Ritter
Mt. Humphreys
Mt. Tyndall
Mt. Whitney
Mt. Diablo
Mt. Taylor
Mt. Wilson
Mt. Lincoln
Mt. Harvard
Longs Pk.
Pikes Pk.
Spanish Peaks
Mt. Graham
Mt. Sitgreaves
Mt. Pleasant
Mt. Duane
Mt. Washburn
Emigrant Pk.
Fremonts Pk.
Union Pk.
Big Horn Mts.
Wind River Mts.
Rattle Snake Hills
Laramie Plains
Sweet Water Mts.
Salmon River Mts.
Camas Prairie
Sage Plain
Steen Snow Mts.
White Ridge
Black Rock Range
Warners Valley
Surprise Valley
Shoshone Mts.
Toiyabe Range
Egan Range
Humboldt Mts.
Monitor Rge.
Reveille Rge.
Kawich Rge.
Ralston Desert
Meadow Val. Highland Rge.
Whitepine Rge.
Toyabe Rge.
Big Smoky Val.
Death Valley
Owen's L.
Mohave R.
Providence Mts.
Spring Mts.
Muddy Rge.
Virgin City
St. George
Beaver
Parowan
Pioche
Hyko
Eureka
Austin
Hamilton
Manti
Gunnison
Fillmore
Salina
Spanish Fork
Provo
Ogden
Brigham City
Corinne
Logan
Malade Cy.
Soda Spgs.
Idaho Cy.
Boise Cy.
Silver Cy.
Jordan Valley
Virginia Cy.
Bannock
Deer Lodge
Silverbow
Gallatin
Butte Cy.
Bozeman
Helena
Hellgate
Lincoln V.
Gate of the Mts.
French Bar
Stevens V.
Lewiston
Walla Walla
Elk City
Florence
Big Hole Prairie
Three Buttes
Bears Paw Mts.
Little Rocky Mts.
Judith Mts.
Ft. Benton
Gr. Falls
Ft. Union
Ft. Reno
Ft. C. F. Smith
Ft. Steele
Ft. Bridger
Bridger
Bitter Creek
Bishop Mt.
Rawlings
Creston
Benton
Lookout
Miser
Cheyenne
Sidney
Laramie
Sherman
Ft. Morgan
Greeley
Evans
Denver
Central City
Golden
Middle Arapahoe Park
North Park
South Park
Hugo
Kit Carson
Colorado Spgs.
Pueblo
Canon City
Leadville
Elizabeth'n
Cimarron
Taos
Mora
Ft. Union
Las Vegas
Ft. Bascom
Santa Fe
Albuquerque
Peralta
Las Lunas
Los Luceros
Trinidad
San Luis Park
Ft. Garland
Spanish Purgatoire Pks.
Las Animas
Arkansas R.
Canadian R.
Pecos R.
Rio Grande
Llano Estacado or Staked Plain
Guadalupe Mts.
Sierra Madre
Sierra Madre or Zuni Mts.
Mesa de los Lobos
Mesa del Caballo
Sra Blanca
Sra de Datil
Sra Capitana
Sra Oscura
Sra Diablo
Sra Quitaca
Sra Solada
Sra Gallinas
Sra Guadalupe
Sra Madalena
Sra Abo
Sra Jicarilla

THE WESTERN STATES AND TERRITORIES.

MAP QUESTIONS.—On what ocean does this section of our country border? Name the principal capes on the shore. What strait north of Cape Flattery? What bay near the parallel of 38°? What islands south of Point Conception?

In what direction do the Sierra Nevada trend? In what direction, the Cascade Mountains? What lower ranges near the coast? Name some peaks in the Sierra Nevada and the Cascade Mountains. What great mountain system traverses the eastern part of this section? What is the general direction of the Rocky Mountains? What mountain chain extends through Utah?

What rivers rise in the Rocky Mountains and flow to the east? Describe the course of the upper Missouri. Name its two largest tributaries. What river empties into the Gulf of California? Its upper course is called Green River: where does it rise? Name the principal tributaries of the Colorado. What rivers empty into San Francisco Bay? Describe the course of the Sacramento. Of the San Joaquin.

What rivers empty into the Pacific Ocean near the parallel of 42°? Of what lake is the Klamath the outlet?

What river empties into the ocean near the parallel of 46°? Where does the Columbia rise? Describe its course. What is its largest tributary? Describe the course of Snake River.

What large lake west of the Wahsatch Mountains? Name some lakes east of the Sierra Nevada.

Name the political divisions of this section. Which of these are traversed by the Rocky Mountains? Which border on the Pacific Ocean? What two divisions include the Cascade Mountains? Which one includes the Sierra Nevada?

Bound California. What is the capital? On what river is it situated? What city on San Francisco Bay?

Bound the following divisions, name the capital, and describe the location of each: Oregon; Nevada; Washington; Idaho; Montana; Wyoming; Colorado; New Mexico; Utah; Arizona.

DESCRIPTION.

I. POSITION.

1. The **Western States and Territories** form the third great group of the United States. They lie between the Central States and the Pacific Ocean, and include the central part of the North American Cordilleras.

They are bounded on the north by the Dominion of Canada, and on the south by Mexico and western Texas.

II. SURFACE.

2. Two great mountain systems traverse this part of our country: (1) The Rocky Mountains, and (2) the Sierra Nevada and Cascade Mountains.

The *Rocky Mountains* trend due north from the Rio Grande to the *Laramie Plains*, a high table-land in southern Wyoming. They change their direction north of these plains, and trend to the north-west.

3. The Rocky Mountains consist of many different ranges, which include beautiful and fertile valleys. The most noted of these are the "Parks" in Colorado; as *San Luis Park*, *South Park*, *Middle Park*, and *North Park*.

The *National Park*, belonging to the United States, is on the borders of Wyoming, Idaho, and Montana.

4. The mountain ranges of central Colorado are the highest part of the system. They contain many peaks more than 14,000 feet high.

5. The *Sierra Nevada* trend north-west from the parallel of 35° to *Mount Shasta*, and contain the highest peak in the United States. The *Cascade Mountains* trend due north from Mt. Shasta.

6. The *Coast Ranges*, which extend along the sea-coast, are much lower than the great mountain chains just described. The low plain of the Sacramento and San Joaquin rivers lies between the coast ranges of California and the Sierra Nevada.

7. The region between the Rocky Mountains on the east and the Pacific ranges on the west, is an arid table-land. It is divided by the *Wahsatch Mountains* into two parts: the *Plateau of the Colorado* in the east, and the *Great Basin* in the west.



View on the Pacific Railroad.

III. RIVERS AND LAKES.

8. The largest rivers of this section rise in the Rocky Mountains, and empty into the Pacific Ocean, the Mississippi, or the Gulf of Mexico.

The *Columbia* rises in British Columbia, flows through Washington Territory, and empties into the ocean near Cape Disappointment. *Snake River* and the *Willamette* are the principal tributaries.

9. *Green River* rises in Wyoming, flows to the south, and receives the *Grand River* in Utah. Below this junction it is

called the *Colorado*. The *Little Colorado* and the *Gila* are the largest tributaries. For more than 300 miles, the Colorado flows through a canon, or gorge, with rocky and precipitous sides from 1500 to 6000 feet high.

10. The *Missouri* is formed by the Gallatin, Madison, and Jefferson rivers; it receives the *Milk River* and the *Yellowstone*.

The other tributaries of the Mississippi, which rise on the eastern slopes of the Rocky Mountains, are the *North* and *South Platte*, the *Arkansas*, and the *Canadian River*.

11. The *Rio Grande* rises in Colorado, and flows through the San Luis Park and central New Mexico.

Humboldt River flows from east to west in Nevada. *Great Salt Lake* is situated in Utah, west of the Wahsatch Mountains. They have no outlet into the sea.

12. The *Sacramento* rises in north-eastern California, passes through a gorge in the Sierra Nevada, and then traverses the low plain west of this mountain range. The *San Joaquin* rises in the Sierra Nevada, and flows north into San Francisco Bay.

QUESTIONS.—1. What part of our country does this group of states occupy?

2. What two mountain systems traverse this group? In what direction does the southern part of the Rocky Mountains trend? In what direction, the northern?—3. Name the four parks of Colorado.—4. What is the highest part of the system?

5. Describe the Sierra Nevada. The Cascade Mountains.—6. Where are the coast ranges? What low plain between them and the Sierra Nevada? —7. Describe the Wahsatch Mountains. Where is the Great Basin? The Colorado Plateau?

8. Describe the Columbia. Name its chief tributaries.—9. Describe Green River. What river joins it? What is the name of the river below the junction of the Green and Grand rivers?—10. Describe the upper Missouri. Name the other tributaries of the Mississippi which rise in the Rocky Mountains.—11. Describe the Rio Grande. The Humboldt. Where is Great Salt Lake?—12. Describe the Sacramento. The San Joaquin.

IV. CLIMATE AND VEGETATION.



View near Denver.

13. The climate of this section is more equable than that of the central and eastern states in the same latitude, owing to the prevailing warm south-west winds.

14. The climate of the plateaus extending east of the Sierra Nevada and the Cascade Mountains, is noted for its dryness. Hence, the vegetation of this vast region is very scanty.

15. Moisture is abundant, and the vegetation quite luxuriant west of those great mountain chains. The largest trees in the world, except in Australia, are found on the western slopes of the Sierra Nevada. These are a species of pine, and frequently exceed 300 feet in height.

V. INHABITANTS AND OCCUPATIONS.

16. The population consists of emigrants from the older states, from Europe, and China.

Mining is the principal occupation of the inhabitants. The Sierra Nevada and other chains of the Cordilleras abound in rich deposits of gold, silver, quicksilver, and copper.

17. Agriculture is carried on chiefly in California, Oregon, and Washington, west of the Sierra Nevada and Cascade Mountains. The plateaus east of these chains have too arid a climate and too barren a soil for farming.

QUESTIONS.—13. What is said of the temperature of this section?—14. In regard to moisture, what is the climate of the plateaus east of the Sierra Nevada and Cascade Mountains?—15. What is the climate west of these chains?

16. What is said of the population? What is the principal occupation? What metals abound in the chains of the Cordilleras?—17. Where is agriculture carried on?

VI. STATES AND CITIES.

18. **California** borders on the Pacific Ocean. It includes the coast ranges, the plain of the Sacramento and San Joaquin, and the Sierra Nevada. On the western slopes of this range are rich gold mines. Quicksilver is found in the coast ranges. The agricultural products form also an important source of wealth.

Sacramento, on the Sacramento River, is the capital. *San Francisco* is the largest city on the Pacific coast.

19. **Oregon** lies north of California. The valley of the *Willamette*, a tributary of the Columbia, is the most densely inhabited portion of the state.

Salem is the capital; *Portland*, the largest city. Both are situated on the Willamette.

20. **Nevada** lies in the Great Basin, east of California, and includes the valley of the Humboldt River. The mines yield large quantities of silver.

Carson City is the capital. *Virginia City* is a mining center.

21. **Washington Territory.**—This territory lies north of Oregon. The north-western shore is deeply indented by Puget Sound. The region west of the Cascade Mountains has a very moist climate, and is covered with gigantic pine forests.

Olympia, on Puget Sound, is the capital.

22. **Idaho Territory** lies east of Oregon and Washington. The Rocky and Bitter Root mountains form part of its boundary. The mines yield large quantities of gold and silver.

Boise City is the capital.

23. **Montana Territory** lies east of Idaho. The western part is traversed by the Rocky Mountains. The Bitter Root Mountains form part of the western boundary. The Missouri flows through the territory from west to east, and receives the Yellowstone. Gold is the chief product.

Helena is the capital. *Virginia City*, on Jefferson River, is surrounded by magnificent mountain scenery.

24. **Wyoming Territory** lies south of Montana, and is traversed by several lofty chains of the Rocky Mountains, the highest of which are the *Wind River Mountains*. There are rich gold mines on the Sweet Water River.

Cheyenne, east of the Rocky Mountains, is the capital.

25. **Colorado** lies south of Wyoming. It is traversed by the Rocky Mountains, which here include the North, Middle, South, and San Luis parks. Colorado produces gold and silver.

Denver, a growing and attractive city, is the capital. *Boulder* and *Leadville* have extensive silver mines.

26. The **Territory of New Mexico** lies south of Colorado, and is traversed by several parallel chains of the Rocky Mountains. The Rio Grande flows through it from north to south. There are valuable gold, silver, and copper mines in New Mexico.

Santa Fé is the capital.

27. **Utah Territory** lies between Colorado and Nevada. It is traversed by the Wahsatch Mountains. In the north-western part lies the Great Salt Lake. The settlements of the Mormons, a peculiar religious sect, are south of this lake.

Salt Lake City is the capital.

28. **Arizona Territory** lies west of New Mexico and south of Utah. The western boundary is formed by the Colorado River. It is traversed by several mountain ranges, and produces gold and silver.

Prescott is the capital.

QUESTIONS.—18. *California:* Bound it. What mountain chains traverse it? Name the principal rivers. Where are the gold mines? Where is quicksilver found? What and where is the capital? Where is San Francisco?

19. *Oregon:* Bound it. What mountains traverse it? What river on the north? What valley is the most densely inhabited? What and where is the capital? Where is Portland?

20. *Nevada:* Bound it. Describe the surface. What river flows through the northern part? What do the mines yield? What and where is the capital? What and where is the principal city?

21. *Washington:* Bound it. Describe the surface. What sound in the north-west? What is the capital?

22. *Idaho:* Bound it. What mountains on the east? What river flows through the southern part? What is the capital?

23. *Montana:* Bound it. What mountains traverse the western part? What river has its source in Montana? Describe the course of the Missouri. What is the chief product? What and where is the capital?

24. *Wyoming:* Bound it. What mountains traverse it? What is the capital? What are the chief towns?

25. *Colorado:* Bound it. What mountains traverse it? Name the four parks in the Rocky Mountains. What are the products? What is the capital? Name two mining towns.

26. *New Mexico:* Bound it. What mountains traverse it? What river flows through it? What is the capital?

27. *Utah:* Bound it. What mountains traverse it? Where is Great Salt Lake? What people live in Utah? Where are their settlements? What is the capital?

28. *Arizona:* Bound it. What river forms the western boundary? Describe the surface. What is the capital?

MAP DRAWING.

MAP OF THE WESTERN STATES AND TERRITORIES.

1. Draw five horizontal and five vertical lines, as in the annexed sketch. You thus obtain a figure divided into sixteen small squares, by means of which the principal points in the boundary line of this section may be readily located.

2. Point A is two thirds the side of a square from the upper right hand corner, and point B is at the lower right hand corner of the figure.

3. Points C, D, and E are found by bisecting the sides of squares.

4. Point F is at the corner of a square, and point G is one fourth the side of a square from the upper left hand corner of the figure.

5. Connect these points by straight lines, in the order of the lettering, and you thus obtain the fundamental figure of this section.

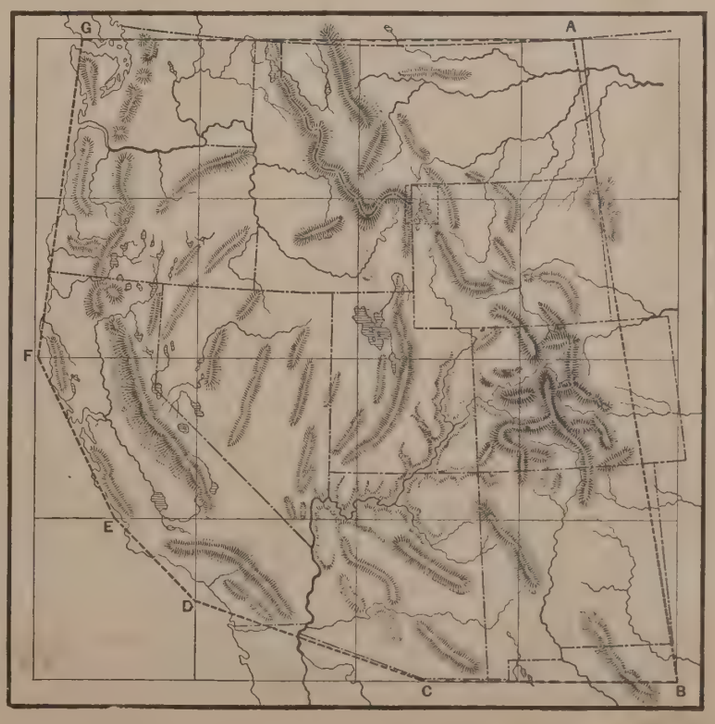
6. The line AB roughly marks the eastern boundary; BC and CD, the southern; and DE, EF, and FG, the Pacific coast. The line GA is nearly identical with the parallel of 49° N. latitude, which separates this section from the Dominion of Canada.

7. Draw the actual boundary lines of the section, and the boundaries between the states and territories.

8. Draw the principal lakes, rivers, and mountain chains. Care should be taken to represent the different heights of the various ranges by the degree of shading. The Rocky Mountains, surrounding the parks in Colorado, are the highest, and should be shaded heavily. The cañon of the Colorado River should also be indicated by shading.

9. Locate the capitals and principal cities, and letter the map.

10. The side of a small square in the figure represents about 300 miles. From the northern to the southern boundary is, therefore, about 1200 miles.




MAP OF THE
DOMINION OF CANADA,
EASTERN PART,
AND NEWFOUNDLAND.
Scale of Statute Miles.
1000 Sq. Mls.
MAP OF THE
DOMINION OF CANADA,
WESTERN PART.
1000 Sq. Mls.
NORTHERN TERRITORY
NORTH EAST TERRITORY
ONTARIO
QUEBEC
NEW BRUNSWICK
PRINCE EDWARD I.
CAPE BRETON I.
NOVA SCOTIA
NEWFOUNDLAND
MANITOBA
ASSINIBOIA
ALBERTA
SASKATCHEWAN
BRITISH COLUMBIA
KEEWATIN
NORTHWEST TERRITORY
YUKON TERR.
HUDSON BAY
JAMES BAY
GULF OF ST. LAWRENCE
GULF OF MAINE
BAY OF FUNDY
ATLANTIC OCEAN
PACIFIC OCEAN
LAKE HURON
L. ONTARIO
L. ERIE
L. SUPERIOR
L. WINNIPEG
L. WINNIPEGOSIS
L. MANITOBA
L. ATHABASCA
MAINE
VERMONT
NEW HAMPSHIRE
MASSACHUSETTS
RHODE ISLAND
CONNECTICUT
NEW YORK
OHIO
MICHIGAN
MINNESOTA
DAKOTA
MONTANA
WASHINGTON TER.
IDAHO
PENNSYLVANIA
Ottawa
Quebec
Montreal
Toronto
Halifax
St. John
Boston
Portland
Buffalo
Chicago
Detroit
Cleveland
Pittsburgh
Columbus
Winnipeg
Regina
Calgary
Edmonton
Victoria
Vancouver
Olympia
Fort Garry
Battleford
Prince Albert
Fort Simpson
Fort Rae
Fort Providence
Fort Reliance
Fort Resolution
Fort Halkett
Fort Chipewyan
Fort Fond du Lac
Fort Churchill
Fort Nelson
Fort Simpson
Fort Severn
Fort Moose
Fort Pelly
Fort Ellice
Fort Bourbon
Fort Williams
Fort Macleod
Fort Kamloops
Fort Hope
Fort Coulonge
Fort Augustus
Fort Wrangel
Fort Yukon
Fort Selkirk
Fort Simpson
Fort Rae
Fort Providence
Fort Reliance
Fort Resolution
Fort Halkett
Fort Chipewyan
Fort Fond du Lac
Fort Churchill
Fort Nelson
Fort Severn
Fort Moose
Fort Pelly
Fort Ellice
Fort Bourbon
Fort Williams
Fort Macleod
Fort Kamloops
Fort Hope
Fort Coulonge
Fort Augustus
Fort Wrangel
Fort Yukon
Fort Selkirk
Mt. St. Elias
Mt. Brown
Mt. Hooker
Mt. Murchison
Mt. Nelson
Mt. Head
Mt. Baker
Mt. Logan
Mt. Murray
Mt. Chilton
Mt. Fairweather
Mt. Albert
Mt. Edward
Mt. Hurd
Mt. Logan
Mt. Murray
Mt. Chilton
Mt. Fairweather
Mt. Albert
Mt. Edward
Mt. Hurd
Mistassinie L.
Nipissing L.
Temiscaming L.
Grand L.
L. Gatineau
L. Tamagamingue
L. Edward
L. Islet
L. Joseph
L. Simcoe
L. Couchiching
L. Nipissing
L. Temiscaming

CANADA.

MAP QUESTIONS.—What part of North America does Canada occupy? What ocean north of it? What ocean east? What country south? What country and what ocean west? What large bay in the north-eastern part of Canada? What bay forms the southern extension of Hudson Bay? What gulf on the east coast of Canada? What island east of the Gulf of St. Lawrence? What islands in this gulf?

What two great mountain ranges traverse the western part of Canada? Of what range in the United States are the Coast Mountains the continuation? What plain in the interior of Canada? What height north of Lake Superior?

What lakes between Canada and the United States? What river is the outlet of Lake Ontario? Name the three largest northern tributaries of the St. Lawrence. What southern tributary is the outlet of Lake Champlain? Name the three largest rivers emptying into James Bay. Name the largest river emptying into Hudson Bay from the west. Of what large lake is Nelson River the outlet?

What river empties into Lake Winnipeg? Name the largest river emptying into the Arctic Ocean. Name some large lakes which it drains. In what plain are these lakes?

What province occupies a peninsula east of the Bay of Fundy? What province north-west of this bay? What island north of Nova Scotia?

What province includes the larger part of the St. Lawrence River? What province west of Quebec? What province south of Lake Winnipeg? What province borders on the Pacific Ocean? What island south-west of British Columbia?

What city on the Ottawa River is the capital of Canada? What is the capital of Nova Scotia? Of New Brunswick? Of Prince Edward Island? Of Quebec? Of Ontario? Of Manitoba? Of British Columbia? Of Assiniboia? Of Saskatchewan? Of Alberta?

What ocean east and south of Newfoundland? What gulf west? What strait separates Newfoundland from the main-land? What cape is the south-east corner of Newfoundland? What and where is the capital?

DESCRIPTION.

I. POSITION.

1. The **Dominion of Canada** occupies the northern part of North America, with the adjacent islands except Newfoundland. It is about as large as the United States, but contains only one twelfth as many inhabitants.



Trout Fishing.

2. Canada is bounded on the north by the Arctic Ocean, and here includes the cold and uninhabitable islands of the *Arctic Archipelago*. The eastern shores are washed by the Atlantic Ocean, from which projects far into the land the large *Hudson Bay*. The Pacific Ocean and Alaska form the western boundary, and the United States the southern.

II. SURFACE.

3. The western portion of Canada is occupied by several mountain ranges, which constitute the northern part of the *Cordilleras*. Not far from the shore, which is broken by inlets, rise the *Coast Mountains;* farther inland are the *Rocky Mountains*, with some very high peaks.

4. From the eastern base of the Rocky Mountains the country gently slopes towards the *Arctic Plain*, which corresponds to the Mississippi Valley in the United States.

The *Height of Land* extends from the Arctic to the Atlantic Ocean, forming a wide curve around Hudson Bay. Near its eastern terminus rise the *Wotchish Mountains*.

III. RIVERS AND LAKES.

5. The largest and most important river of Canada is the *St. Lawrence*, the outlet of the *Great Lakes*. It receives several tributaries from the north, of which the *Ottawa*, *St. Maurice*, and *Saguenay* are the largest.

The principal southern tributaries are the *Richelieu*, the outlet of Lake Champlain, the *St. Francis*, and the *Chaudiere*.

6. The *River St. John*, rising in Maine, flows through New Brunswick, and empties into the Bay of Fundy.

Into James Bay flow the *East Main*, the *Abittibbe*, and the *Albany* rivers. The *Saskatchewan River* flows east into Lake Winnipeg. The surplus waters of this lake flow through the *Nelson River* into Hudson Bay.

The Arctic Plain is drained by the *Mackenzie River*. The *Frazer River* is the principal stream of British Columbia.

IV. CLIMATE AND VEGETATION.

7. The provinces east of the Rocky Mountains have a very severe climate; that of British Columbia is milder.

A broad belt of land along the Arctic Ocean produces no vegetation except mosses and small stunted shrubs. South of this region is a broad expanse of pine forests, which, in the south-east, are merged into forests of deciduous trees. The southern part of the Arctic Plain contains much prairie land.

QUESTIONS.—1. What part of North America does Canada occupy? How large is it? 2. Bound Canada. 3. Describe its surface. Where are the Coast Mountains? The Rocky Mountains? 4. Where is the Arctic Plain? Describe the Height of Land.

5. Name the principal river of Canada. Of what is the St. Lawrence the outlet? What are its chief tributaries? 6. Describe the St. John River. What rivers flow into James Bay? Describe the Saskatchewan. What river drains the Arctic Plain? Name the principal river of British Columbia. 7. What is said of the climate of the eastern provinces? Of British Columbia? Of the vegetation of the country?

V. GOVERNMENT AND PROVINCES.

8. Canada includes seven organized provinces: *Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, Manitoba, British Columbia;* the unorganized *North-east, Northern,* and *North-west* territories; and the districts of *Kewaydin, Assiniboia, Saskatchewan, Alberta,* and *Athabasca.*

9. The Dominion is ruled by a Governor-general, who is appointed by the sovereign of Great Britain. The laws are made by a Parliament of two Houses; a *Senate,* appointed for life, and a *House of Commons,* elected by the people.

10. **Ontario** is bounded on the south and west by the Great Lakes, on the north by the Northern Territory, and on the east by Quebec. It is very fertile, particularly in the south.

Agriculture and lumbering are the chief pursuits; and large amounts of grain and lumber are exported. Ontario is well supplied with railroads. *Toronto* is the capital.

Ottawa, the capital of the Dominion, lies in this province.

11. **Quebec** extends from the Ottawa River to the Strait of Belleisle, and has a fertile soil. It formerly belonged to France, and the inhabitants are chiefly descendants of French settlers.

Farming, lumbering, and mining are the principal industries. The mines produce gold, copper, iron, and other ores.

Quebec, on the St. Lawrence, is the seat of government. It is strongly fortified. *Montreal,* the largest city of Canada, is situated at the head of navigation on the St. Lawrence, and has an extensive commerce.

12. **New Brunswick** lies between Maine and the Gulf of St. Lawrence. It has an undulating surface, and is well wooded and watered. Lumbering, ship-building and farming are the chief industries. Coal and iron are abundant.

Fredericton, the seat of government, is on the River St. John. *St. John,* a large commercial city, lies at the mouth of that river, and near the Bay of Fundy.

13. **Nova Scotia** includes *Cape Breton Island* and the peninsula east of the Bay of Fundy. The surface consists of high hills and broad valleys. Fruits and grain are the chief products. Ship-building and fishing are carried on extensively. The province has large deposits of coal. *Halifax,* on a fine bay, is the capital, and has much commerce.

14. **Prince Edward Island** lies in the southern part of the Gulf of St. Lawrence, and is separated from New Brunswick by Northumberland Strait. Farming and fishing are the chief pursuits. *Charlotte Town* is the capital.

15. **Manitoba** lies between Dakota and Minnesota on the south, and Saskatchewan and Kewaydin on the north. The Red River of the North flows through this province, and its valley has much fertile land. *Winnipeg* is the capital.

16. **British Columbia** occupies the south-western part of Canada, and lies between the main range of the Rocky Mountains and the Pacific Ocean. The province includes numerous islands, the largest of which is *Vancouver.*

British Columbia is covered with magnificent pine forests, and is rich in fur-bearing animals—bears, lynx, marten, and beaver. Gold is extensively mined in the Frazer River valley.

Victoria, on Vancouver Island, is the capital. *New Westminster,* on Frazer River, is noted for its salmon fishing.

17. The **North-east, Northern,** and **North-west territories** have a local government. Kewaydin is under the jurisdiction of the Lieutenant-Governor of Manitoba.

18. **Newfoundland** does not yet belong to the Dominion of Canada. Its coast is indented by numerous bays. The interior is a rocky table-land, covered with forests, lakes, and swamps.

Dense fogs are common at all seasons of the year, particularly in the spring. Potatoes, turnips, and cabbages are raised.

The principal occupation is cod-fishing upon the Newfoundland Banks. *St. Johns* is the capital.

The small islands, *Miquelon, Langley,* and *St. Pierre,* belong to France.

QUESTIONS.—8. Name the seven provinces of Canada. The territories and districts. 9. How is Canada governed?

10. Bound Ontario. Describe this province. Name the chief industries. Where is Toronto? Ottawa? 11. What is said of Quebec? Of the inhabitants? The industries? Where is Quebec? Montreal?

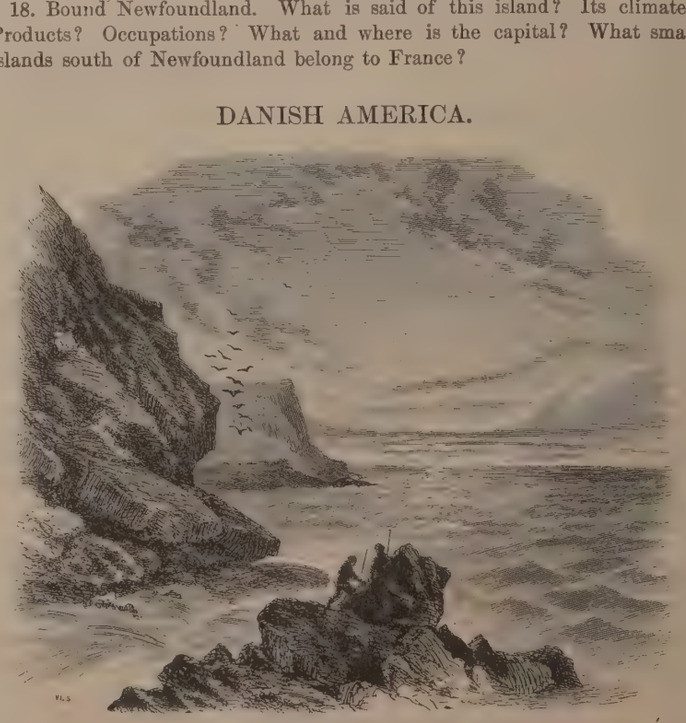
12. Bound New Brunswick. Describe it. Mention the chief pursuits. The products. Where is Fredricton? St. John?

13. Locate and describe Nova Scotia. What is the capital? 14. Where is Prince Edward Island? What are the chief industries? What is the capital? 15. Describe Manitoba. What is the capital? 16. Locate and describe British Columbia. Mention its chief towns.

17. What is said of the territories? Of Kewaydin?

18. Bound Newfoundland. What is said of this island? Its climate? Products? Occupations? What and where is the capital? What small islands south of Newfoundland belong to France?

DANISH AMERICA.



View on the Coast of Greenland.

19. Danish America includes two islands, *Greenland* and *Iceland.* They belong to the kingdom of Denmark. (See map of North America).

20. **Greenland** lies east of Davis Strait, Baffin Bay, Smith Sound, and the narrow channel leading north. This large island is a rocky plateau, covered with fields of snow and ice. The climate is intensely cold. Reindeer abound, and seals, walruses, and whales live in the surrounding sea.

The inhabitants are Esquimaux. The *Danes* have established several missionary stations along the western coast. The dog is the only domestic animal, and is employed to draw sledges. *New Herrenhut* is the largest settlement.

21. **Iceland** is separated from Greenland by Denmark Strait; its northern extremities touch the Arctic Circle. The greater part of the island is occupied by snow-covered mountains and rocky table-lands. There are seven active volcanoes, the most noted of which is *Mt. Hekla*. The *Geysers* are springs which throw out, at intervals, jets of hot water.

22. The climate is cold and moist, and the vegetation consists of grass, herbs, and a few birches. The inhabitants are descendants of the ancient Northmen. Their chief occupations are farming, fishing, and the raising of sheep. Potatoes and a few garden vegetables are the only products. The only fuel is drift-wood, brought by oceanic currents to the south-western shore. *Reykjavik* is the capital.

QUESTIONS. — 19. What two islands constitute Danish America? 20. What waters surround Greenland? Describe this island. What is said of the climate? The animals? Who are the inhabitants? What nation has established missionary stations on the island? What is the largest town?

21. What strait separates Iceland from Greenland? What is said of Iceland? How many active volcanoes on the island? What one is the most noted? What are the Geysers?

22. Describe the climate. The inhabitants. Occupations. Productions. What is the capital?

MAP DRAWING.

MAP OF CANADA.

1. Draw four horizontal and six vertical lines, as in the annexed sketch. You thus obtain a figure, which is divided into fifteen squares.

2. To find point A, extend the fourth vertical line (counting from the right) above the figure one third the side of a square. It marks the north-western point of North Devon Island in the Arctic Archipelago.

3. Points B, C, and E are found by dividing the sides of squares into fourths. Point B marks the eastern extremity of Newfoundland. Point C marks Lake Erie, and point E is immediately south-west of Vancouver Island.

4. Points D and F are found by dividing the sides of squares into halves.

5. Connect these points by straight lines, and you obtain the fundamental figure of the Dominion of Canada.

6. The line AB roughly marks the north-eastern coast and BC the south-eastern boundary line. CD bisects Lake Huron. DE is nearly identical with the parallel of 49°. The line EF roughly marks the western boundary line; FA, the north-western.

7. Draw the actual boundary line of the Dominion, with the islands belonging to it. Draw Newfoundland.

8. Draw the principal lakes, rivers, and mountain chains. Locate the largest cities, and letter the map.

9. One side of a square in the figure is about 660 miles. Hence, from point A to the U. S. boundary line is about 1,850 miles, and from point B to the western coast of the Dominion is about 3,300 miles.



MISCELLANEOUS QUESTIONS.—Name the principal capes on the eastern coast of the United States and Canada. Name the indentations on this coast. Name the capes and indentations on the western coast of the United States and Canada.

What states include parts of the Apalachian system? What divisions include parts of the Rocky Mountains? What divisions include parts of the Atlantic coast plain?

What divisions are drained by the Mississippi and its tributaries? What divisions are drained by the St. Lawrence and its tributaries?

Of what river is the Saguenay a tributary? The Mohawk? The Wabash? The Muskingum? The Miami? The Maumee? The Illinois? The Wisconsin? The Platte? The Arkansas? The Red River? The Red River of the North? The Yazoo? The Big Sandy? The Kentucky? The Ottawa?

Where does the Missouri rise? Through what divisions does it flow? What is the general direction of its course? Where does it empty into the Mississippi? Name its principal tributaries.

What two rivers form the Ohio? In what state does the Alleghany rise? The Monongahela? What city lies at their junction? What states border upon the Ohio? Name its principal tributaries.

Name the Great Lakes. What divisions border upon the lakes and the St. Lawrence? Name their tributaries. Into what gulf does the St. Lawrence empty? What states border upon the Connecticut? Through what states does it flow? Into what water does it empty?

Where does the Hudson rise? In what direction does it flow? Through what state does it flow? Where does it empty? Where does the Delaware rise? What states border upon it? Where does it empty?

Where does the North Branch of the Susquehanna rise? The West Branch? Into what bay does the Susquehanna empty? Where does the Potomac rise? What states border upon it? Into what bay does it empty?

Where does the James rise? Through what state does it flow? Into what bay does it empty? Describe the Savannah. What rivers form the Altamaha? What rivers form the Apalachicola?

Where does the Rio Grande rise? In what direction does it flow? Into what gulf does it empty? Where does the Green River rise? In what direction does the Colorado flow? Into what gulf does it empty? Where does the Columbia rise? Describe its course. Where does it empty?

Name the states and territories comprised in each of the three groups into which the United States is divided. Name their capitals. What physical region does each group include?


MAP OF
CENTRAL AMERICA
and
THE WEST INDIES.
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
1000 Square Miles.
MAP OF
CUBA.
MAP OF
MEXICO.
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
1000 Square Miles.
West of Washington.
West of Greenwich.
East of Washington.
West of Washington.
GULF OF MEXICO
CARIBBEAN SEA
PACIFIC OCEAN
ATLANTIC OCEAN
GREAT BAHAMA (British) I.
Gulf of Campeachy
Gulf of Honduras
Leeward Islands
Lesser Antilles or Windward Is.
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
VENEZUELA
GUIANA
HAYTI
JAMAICA
CUBA
YUCATAN
CALIFORNIA
LOWER CALIFORNIA
NEW MEXICO
ARIZONA
TEXAS
LOUISIANA
MEXICO
Tropic of Cancer
Tropic of Cancer
Isthmus of Panama
Isthmus of Tehuantepec
Bay of Panama
Gulf of Campeachy
Gulf of Tehuantepec
Gulf of Mexico
Bolson de Mapimi
Sierra Madre
Sierra Madre
Sierra Madre
Rio Grande
Rio Grande
Colorado R.
Pecos R.
Nueces R.
Concho R.
Conchos R.
Yaqui R.
Gila R.
Colorado R.
Orinoco R.
Cauca R.
Magdalena R.
Atrato R.
Usumacinta R.
Grijalva R.
Motagua R.
Segovia R.
Coco R.
Chagres R.
Tigre I.
Cedros I.
Revilla Gigedo Is.
Roca Partida
Socorro I.
Santa Rosa I.
San Benito I.
Tres Marias
Las Tres Marias
Todos Santos
Cerralbo I.
San Jose I.
Pearl Is.
Cuba Is.
Jardines Is.
I. of Pines
Grand Cayman
Cayman Brac
Lit. Cayman
Turk Is.
Caicos Is.
Mariguana
Plana
Long I.
Rum Cay
Cat I.
Watling I.
Eleuthera
Lit. Abaco
Gr. Abaco
Bahama
Gr. Inagua
Lit. Inagua
Gr. Cayman (Brit.)
Swan Is.
Roatan I.
Bonacca I.
Utila I.
Ruatan I.
Barbuda (Br.)
Antigua (Br.)
Montserrat (Br.)
Guadeloupe (French)
Marie Galante (French)
Dominica (Br.)
Martinique (French)
St. Lucia (Br.)
St. Vincent (Br.)
Grenadines (Br.)
Barbadoes (Br.)
Grenada (Br.)
Tobago (Br.)
Trinidad (Br.)
Anguilla (Br.)
St. Martin (French & Dutch)
St. Barthelemew (Sw.)
St. Christopher (Br.)
St. Croix I. (Danish)
Virgin Is.
St. Thomas (Danish)
Aruba I.
Curaçao I.
Oruba I.
Blanca I.
Margerita I.
Tortuga I.
Buen Ayre I.
Pen. Paraguana
Peninsula Guajira
Sierra Nevada de Santa Marta
Maracaibo
Caracas
Spanish Port Trinidad (Br.)
Gulf of Paria
Orchila I.
Ponce
Mona I.
Jacmel
Genave I.
Cabo Mts.
Cape Haytien
Windward Passage
Mona Passage
Vague
Samana
Plana
Mariguana
Long I.
Rum Cay
Cat I.
Watling I.
Eleuthera
Gr. Abaco
Lit. Abaco
Bahama
Nassau
St. Andrew I.
N. Providence I.
Gr. Exuma
Matanzas
HAVANA
Bahia Honda
Bejucal
Cardenas
La Grande
Santa Clara
Cienfuegos
S. Espiritu
Trinidad
Jardines Is.
I. of Pines
C. San Antonio
C. Corrientes
Organ Mts.
Balvarano
Fernando de Nuevitas
Puerto Principe
Jibara
C. Lucretia
Nipe B.
Cauco R.
Bayamo
Manzanillo
Sierra Maestra
El Cobre
Santiago de Cuba
C. Cruz
Baracoa
Batabano
Isle of Pines
Nuevitas
Sagua la Grande
C. Catoche
C. San Antonio
C. Corrientes
C. Cruz
C. Sable
Key West
Florida
Pt. Palmas
C. Catoche
L. Cozumel
Gr. Cayman (Brit.)
Belize
St. Turneffe
Truxillo
Omoa
Cohuta
Guatemala
Coniayagua
Guaymaca
Tegucigalpa
Telica
Leon
Managua
Nicaragua
L. Nicaragua
Blewfields
Greytown
San Juan R.
Ometepe
Virasu
Reventazon
Cartago
Chiriqui G.
Chiriqui
Veragua
Conchagua
Fonseca
Cosegüina
Amapala
Escuintla
Amatitan
Vera Paz
Peten
Yucatan
Campeachy
Sisal
Merida
Valladolid
Ascension B.
Cozumel I.
Ambergris I.
Belize
Turneffe
Bonacca I.
Utila I.
Ruatan I.
Roatan I.
Omoa
Truxillo
Gracias a Dios
Cape Gracias a Dios
Blewfields
Greytown
San Juan R.
Nicaragua
Chontales
Leon
Telica
Managua
Monagua
Masaya
Granada
Nicoya
Nicoya G.
Gulf of Nicoya
Cartago
Reventazon

MEXICO, CENTRAL AMERICA, AND THE WEST INDIES.

MAP QUESTIONS.—What ocean west of Mexico? What gulf east? What is the name of the southern part of the Gulf of Mexico? What peninsula east of the Gulf of Campeachy? What sea east of the peninsula of Yucatan?

What peninsula north-west of Mexico? What gulf between Lower California and the main-land? What cape at the southern end of Lower California? What gulf on the southern coast of Mexico? What country north of Mexico? What country south-east of Mexico?

Does the greater part of Mexico consist of highlands or low plains? What mountain chain crosses Mexico from north-west to south-east? Name some volcanoes and peaks south of the parallel of 20°.

What river forms part of the northern boundary of Mexico? What river in northern Mexico empties into the Rio Grande? Name the rivers emptying into the Gulf of California. Name two rivers emptying into the Pacific Ocean.

What is the capital of Mexico? What sea-port on the Gulf of Campeachy? What city near the mouth of the Rio Grande? What sea-port on the Pacific in the latitude of Cape San Lucas?

What sea east of Central America? What ocean west? What gulf east of British Honduras? Does the greater part of Central America consist of highlands or low plains? Name some volcanoes near the western shore.

What river forms part of the western boundary? Into what gulf does the Usumasinta empty? What large lake in the southern part of Central America? What river is its outlet? Into what sea does the San Juan empty?

Name the five states of Central America. What colony east of Guatemala? What is the capital of Guatemala? Of San Salvador? Of Honduras? Of Nicaragua? Of Costa Rica?

What sea south of the West Indies? What ocean north and east? What island south of Florida? What strait between Cuba and Florida? What island south of Cuba? What island east of Cuba? What island east of Hayti? Name the four Greater Antilles. What islands south-east of the Greater Antilles? What islands north of Cuba and Hayti?

What is the capital of Cuba? Of Jamaica? Of Porto Rico? What two states on the island of Hayti? What is the capital of Hayti? Of Dominica?

DESCRIPTION.

I. MEXICO.

1. POSITION.—Mexico lies south of the United States, and extends from the Gulf of Mexico on the east to the Pacific Ocean on the west. It is more than sixteen times as large as the state of Pennsylvania.

2. The only large indentation of the coast is the *Gulf of California,* which separates the peninsula of *Lower California* from the main-land.

The peninsula of *Yucatan* forms the south-eastern part of Mexico. It lies east of the *Gulf of Campeachy.*

3. SURFACE.—Mexico includes the most elevated part of the Cordilleras of North America. It consists almost entirely of a lofty plateau traversed by a number of mountain chains.

Narrow plains extend along the coasts of the Pacific Ocean and the Gulf of Mexico.

4. The principal mountain chain is the *Sierra Madre,* which in the south extends along the eastern coast, but farther north traverses the plateau in a north-westerly direction and terminates south of the Gila River.

5. In the southern part of Mexico there are several lofty volcanoes in a line from east to west; as, *Orizaba, Popocatepetl, Toluca, Jorullo,* and *Colima.* Popocatepetl is the loftiest mountain in Mexico.

6. RIVERS AND LAKES.—There are no large navigable rivers in Mexico. The *Rio Grande* forms part of the northern boundary. Its principal tributary is the *Conchos,* which rises in the Sierra Madre.

The *Usumasinta* empties into the Gulf of Campeachy. The *Rio de las Balzas* and the *Rio Grande de Santiago,* which drains *Lake Chapala,* empty into the Pacific Ocean.

7. CLIMATE AND VEGETATION.—Mexico lies in the torrid zone, and in the warmer parts of the north temperate zone. Most of its area, however, is occupied by high table-lands, the climate of which is mild and pleasant, except in the most elevated parts, where it is always cold. Many plants of the temperate zone are found, and corn, wheat, and rye are raised.

8. The climate of the low coast plains is very hot and unhealthy. Palms, bananas, and other tropical plants grow luxuriantly. The inhabitants raise the sugar-cane, cotton, and indigo.



View of Jalapa.

9. INHABITANTS AND CITIES.—Mexico has about twice as many inhabitants as the state of New York. They are mostly Indians and descendants of Spaniards. The country was conquered by the Spaniards in 1519.

10. The wealth of the country consists chiefly in the silver which the numerous mines yield. The form of government is republican.

11. The city of *Mexico*, about as large as San Francisco, is the capital. It is situated on an elevated table-land, and surrounded by chains of mountains. The principal sea-ports are *Vera Cruz*, on the Gulf of Campeachy, and *Acapulco* and *Mazatlan*, on the Pacific coast. *Guanajuato* is situated in a district of rich silver mines. *Chihuahua* is situated in the northern part of the country; *Jalapa*, in the eastern part.

QUESTIONS.—1. Bound Mexico.—2. Where is the Gulf of California? The peninsula of Lower California? The peninsula of Yucatan? The Gulf of Campeachy?

3. Of what great system does the plateau form a part? Where are the low plains?—4. Where is the Sierra Madre?—5. Where is the volcano Orizaba? Popocatepetl? Toluca? Jorullo? Colima?

6. Describe the Rio Grande. The Usumasinta. The Rio de las Balzas. The Rio Grande de Santiago. Lake Chapala.

7. What is said of the climate of the table-lands?—8. What is said of the climate of the low plains? What plants grow on them?

9. How many inhabitants has Mexico? What is said of them?—10. In what does the wealth of the country consist?—11. Where is the city of Mexico? Vera Cruz? Mazatlan? Acapulco? Guanajuato? Chihuahua? Jalapa?

II. CENTRAL AMERICA.

12. POSITION.—Central America lies south-east of Mexico, between the Caribbean Sea and the Pacific Ocean. It is more than four times as large as Pennsylvania.

13. SURFACE.—The country is occupied by the southern portion of the North American Cordilleras. There are only a few narrow strips of low plain along the coast.



Aboriginal Pillar.

14. In this country, the Cordilleras form a mountainous and broken table-land, which is highest in the south and west, and gradually descends to the north and east. There are a large number of active volcanoes upon its highest or south-western margin. The most noted are *San Salvador*, *Cosegüina*, *Orosi*, and *Chiriqui*.

15. The most important rivers are the *Usumasinta*, forming part of the north-western boundary; the *Ulloa*, emptying into the Gulf of Honduras; and the *San Juan*, which is the outlet of *Lake Nicaragua*.

16. The climate of Central America is similar to that of Mexico. It is temperate and pleasant on the high table-lands, and very hot on the low plains along the coasts.

17. The population consists of Spaniards, Creoles, and Indians. Their chief occupation is agriculture. *Cotton*, *coffee*, *sugar*, and *bananas* are the principal products. Large quantities of mahogany, rosewood, and logwood are exported.

18. STATES.—Central America includes five independent republics and the English colony of British Honduras.

(1) **Guatemala** borders on Mexico, the Pacific Ocean, and the Gulf of Honduras. *Guatemala* is the capital.

(2) **San Salvador** borders on the Pacific Ocean. The capital is *San Salvador*.

(3) **Honduras** borders on the Pacific Ocean and the Gulf of Honduras. *Tegucigalpa* is the capital, and is situated on the table-land.

(4) **Nicaragua** extends from the Pacific Ocean to the Caribbean Sea. *Managua* is the capital.

(5) **Costa Rica** is the most southern of the five republics. Excellent coffee is raised here. *San José* is the capital.

(6) **British Honduras** lies on the Gulf of Honduras.

QUESTIONS.—12. Bound Central America. What is said of its size?

13. What is said of the surface?—Describe the Cordilleras in Central America.

15. Describe the Usumasinta River. The Ulloa. The San Juan. What lake does the San Juan drain?—16. What is said of the climate?—17. What is said of the population? Name the agricultural products.

18. What does Central America include? What is the capital of Guatemala? Of San Salvador? Of Honduras? Of Nicaragua? Of Costa Rica? Where is British Honduras?

III. THE WEST INDIES.

19. The West Indies consist of three distinct chains of islands: the Greater Antilles, the Lesser Antilles, and the Bahama Islands.



Scene in Jamaica.

20. The **Greater Antilles** comprise the four islands of *Cuba*, *Hayti*, *Porto Rico*, and *Jamaica*. They are traversed by mountain ranges, and contain extensive low plains of great fertility.

21. As they are situated in the torrid zone, they have a hot climate, tempered, however, by prevailing sea-breezes. They are subject to frequent hurricanes.

Agriculture and commerce are the principal occupations of the inhabitants. Sugar, coffee, cotton, and tobacco are the great staples.

22. **Cuba** is the largest of the Greater Antilles. It is bounded on the north by the Gulf of Mexico and the Atlantic Ocean; on the south, by the Caribbean Sea. It is nearly as large as Maine and Massachusetts together.

Cuba is a Spanish colony. *Havana*, the residence of the Captain-general, is the largest city and most important commercial emporium of the West Indies. It exports much sugar, coffee, and tobacco.

23. **Jamaica**, lying south of Cuba, is an English colony. *Spanish Town* is the residence of the Governor; *Kingston* is the largest city.



View on the Coast of Cuba.

Hayti, lying east of Cuba, embraces two independent republics: *Dominica*, in the east, and *Hayti*, in the west. The inhabitants are negroes and mulattoes.

Porto Rico is a Spanish colony. *San Juan* is the capital city.

24. The **Lesser Antilles** extend in a curved chain from north to south, and inclose the Caribbean Sea on the east. The chain consists of a large number of small mountainous islands. Active volcanoes are found on several of these islands.

Most of the Lesser Antilles belong to England and France.

25. The **Bahama Islands** lie north-east of Cuba, and form a chain which extends in a north-westerly direction. They are all low and flat, and have a tropical climate.

The Bahamas belong to England.

QUESTIONS.—19. Name the three chains of islands which constitute the West Indies.—20. Name the Greater Antilles. What is said of their surface?—21. What is said of their climate? What are the agricultural staples?

22. Bound Cuba. Of what country is it a colony? What is the largest city? What are its exports?

23. Where is Jamaica? By what sea is it surrounded? To whom does it belong? What is the residence of the Governor? What is the largest city? Where is Hayti? What two republics does it embrace? What are the inhabitants? Where is Porto Rico? Of what country is it a colony?

24. Describe the Lesser Antilles. What sea west of them? What ocean east? What is said of the surface? To whom do they chiefly belong?

25. Where are the Bahama Islands? Describe them. To whom do they belong?

MAP DRAWING.

MAP OF MEXICO.

1. Draw four horizontal and six vertical lines, as in the annexed figure. You thus obtain a rectangle, which is divided into fifteen squares.

2. Point A is one third the side of a square to the left of, and one third the side of a square above the left upper corner of the rectangle. Point B is the center of the side of a square. Points C and E are the corners of squares. Point D is the center of a square.

3. Point F is one third of the side of a square to the left of the right lower corner. Point G is the center of the side of a square. Points H and I are the centers of squares. Connect these points by straight lines, and draw the outline.

4. The line A B marks the northern boundary; B C marks the general direction of the Rio Grande. Point E is near Cape Catoche; Point G is at the Gulf of Tehuantepec. Between H and I is the entrance of the Gulf of California. The line I A marks the direction of the peninsula of California.

5. Draw the principal rivers and mountains, locate the chief cities, and letter the map.

The side of a square is equal to 354 miles.

MAP OF CENTRAL AMERICA AND THE WEST INDIES.

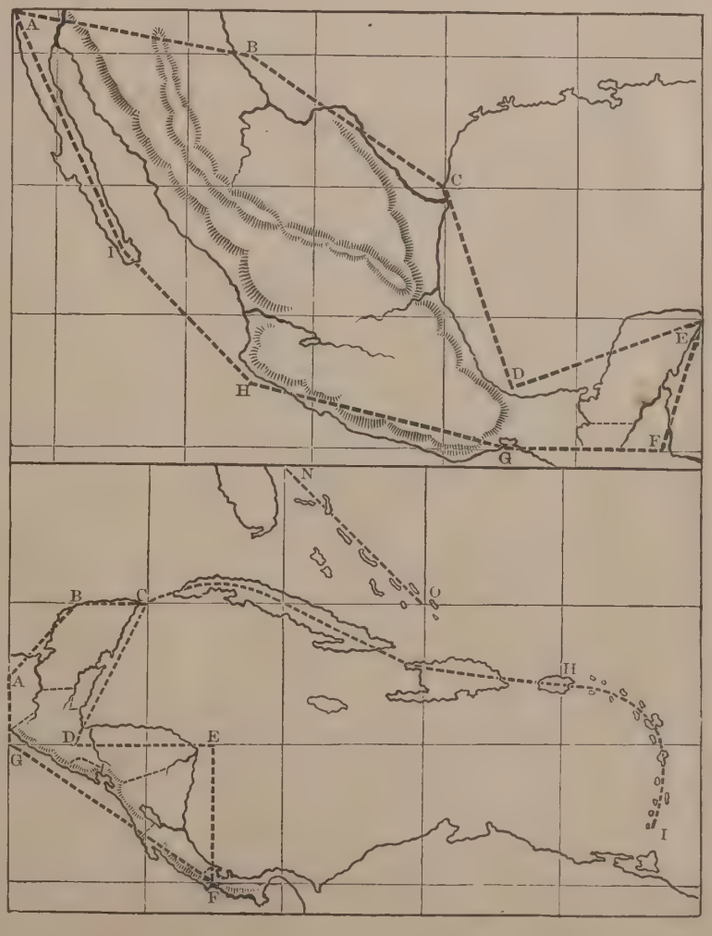
1. Draw four horizontal and six vertical lines, as in the annexed figure. You thus obtain a rectangle, which is divided into fifteen squares.

2. Points A, B, D, E, and F are the centers of the sides of squares. Points C and G are the corners of squares. Connect the points by straight lines. B C marks the northern coast of Yucatan; C D, the eastern.

3. Draw the outlines of Central America, the principal rivers, Lake Nicaragua, and the mountains. Locate the chief cities, and letter the map. Observe that the Isthmus of Panama is a little to the north of the corner of the square, and east of point F.

4. Draw a curve from point C to the east. At H it passes through the center of the side of a square, and terminates at I, a little to the south-east of the center of a square. This curve indicates the trend of the Antilles Islands.

5. The diagonal N O indicates the general trend of the Bahama Islands. Draw the Antilles and Bahamas, locate the principal cities, and letter the map. One side of a square is equal to about 445 miles.




80
70
60
50
West of Greenwich.
40
Central America
CARIBBEAN SEA
ATLANTIC OCEAN
PACIFIC OCEAN
Barbadoes I.(Br.)
Grenada I.(Br.)
Tobago I.(Br.)
Trinidad I.(Br.)
L. Margarita
CARACAS
Cartagena
Sta. Marta
Maracaybo
Valencia
Barquisimeto
Truxillo
Merida
Pamplona
Varinas
Llanos
Orinoco R.
Angostura
Barcelona
Cumana
Isthmus of Panama
Quibo I.
Antioquia
Medellin
Socorro
Tunja
Atures
Maypures
VENEZUELA
GEORGETOWN
PARAMARIBO
CAYENNE
C. Orange
BOGOTA
V. Tolima
S. Juan
Buenaventura
B. of Choco
Popayan
Mt. Duida
Esmeralda
Mt. Roraima
Sra. Pacaraima
Guiana
British
Dutch
French
I. Maraca
Amazon R.
Equator
Pasto
V. Pichincha
V. Cayamoe
QUITO
Antisana
V. Cotopaxi
Riobamba
V. Sangay
Mt. Chimborazo
Pt. S. Helena
G. of Guayaquil
C. Parina
ECUADOR
COLUMBIA
Cuenca
Loja
Caqueta or Japura R.
Rio Negro
Barcellos
Mourn
Obidos
Manaos
Serpa
Santarem
Macapa
I. Caviana
Marajo I.
Para
Braganza
Cametu
Vizeu
Maranhao
Paranahyba
Fortalesa
Ciara
Aracati
C. St. Roque
Caxias
Therezina
Natal
Parahyba
C. Branco
Recife
Oeiras
Tabatinga
Selvas of the Amazon
Payta
Pta. Aguja
Lobos Is.
Jaen
Sarayacu
Lambayeque
Cajamarca
Patas
Truxillo
Huanuco
Caxatambo
Pasco
Tarma
Callao
LIMA
Huamanga
Cuzco
Chincha Is.
Pisco
PERU
Andes
Campos Parecis
Cordillera Geral
Diamantina
Sra. dos vertentes
Sra. do Espinhaco
Cordillera do Espinhaco
Sra. Tabatinga
BRAZIL
Sta. Maria
Alagoas
Macayo
Aracaju
Barra
Caxoeira
Bahia (San Salvador)
All Saints Bay
Palma
Urubuco
Contas R.
Belmonte
Porto Seguro
Nevado de Sorata
Nev. de Illimani
Chuquibamba
V. of Arequipa
Arequipa
Islay
Arica
B. of Arica
Oruro
La Paz
Titicaca L.
Cochabamba
Santa Cruz
V. Sahama
V. Gualatieri
SUCRE
Potosi
BOLIVIA
Cuyaba
Matto Grosso
Goyaz
Pireneos Mts.
Diamantino
Mt. Itambe
Mt. Itacolumi
Ouro Preto
Victoria
Iquique
V. Tirima
V. Atacama
Tarija
Miranda
Tiete R.
Mt. Itatiaya
Sra. Mantiqueira
C. S. Thome
C. Frio
RIO JANEIRO
Cobija
Tropic of Capricorn
Conception
S. Paulo
Santos
Iguape
Sra. do Mar
Ivahy R.
Curitiba
Villa Rica
Ytapua
ASSUMPTION
PARAGUAY
Jujuy
Salta
V. Llullaillaco
St. Felix I.
St. Ambrose I.
Calderas
V. de Copiapo
Tucuman
Corrientes
Blumenau
Desterro
Sta. Catharina I.
Catamarca
La Rioja
S. Leopoldo
Porto Alegre
La Serena
Porongos L.
Cordova
Santa Fé
Parana
Paysandu
Laguna Dos Patos
S. Pedro
San Juan
Juan Fernandez I.
Mas-a-tierra
Valparaiso
SANTIAGO
Mt. Aconcagua
Mendoza
URUGUAY
Colonia
S. Theresa
Maldonado
MONTEVIDEO
BUENOS AYRES
Rio de la Plata
Pampas
Talca
Chillan
Concepcion
V. de Callaqui
V. Lanquimai
Dolores
C. S. Antonio
C. Corrientes
Bahia Blanca
Valdivia
Albemarle I.
Galapagos Is.
(To Ecuador)
I. Chiloe
V. Osomo
V. Corcovado
Mt. Yanteles
G. of San Matias
St. Joseph Pen.
Chonos Archipelago
Pen. Tres Montes
G. of Penas
G. of St. George
C. Blanco
Wellington I.
C. Barreras
Mt. Stokes
Hanover I.
Q. Adelaide I.
Magellan Str.
Magellan Str.
Desolation I.
Tierra del Fuego
Fireland
Mt. Sarmiento
Staten I.
C. Horn
Falkland Is.(Br.)
ATLANTIC OCEAN
PACIFIC OCEAN
Navy Bay
Aspinwall or Colon
Portobelo
C. San Blas
Chagres
Gorgona
Cerro Gigante
Panama
Taboga I.
Chepo R.
MAP OF THE ISTHMUS OF PANAMA.
(To Columbia)
PHYSICAL and POLITICAL MAP OF
SOUTH AMERICA.
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
0 100 200 300 400 500 600
Pennsylvania 46,000 sq mls.
23
West of Washington.
13
3
0
17
27
37
47
East of Washington.
57
50
40
30
20
10
0
H. Chandler, Engraver, Buffalo.

SOUTH AMERICA.

MAP QUESTIONS.—What ocean bounds South America on the east? What ocean on the west? What sea on the north? What isthmus joins it to North America? What gulf on the northern shore of South America? What island at the eastern end of the Caribbean Sea? What capes near the eastern extremity of the grand division? What cape on the eastern coast near the tropic of Capricorn?

What island at the southern extremity of the grand division? What strait separates Tierra del Fuego from the grand division? What bay on the western coast north of the parallel of 20°? What gulf south of the equator?

What great mountain system extends along the western coast of the grand division? What plateau in the north-eastern part? Where is another extensive table-land?

What river empties into the Caribbean Sea? What river empties into the Atlantic opposite Trinidad? Name two of its tributaries. What river empties into the Atlantic near the equator? Where does the Amazon rise? Name two northern tributaries. Name four southern tributaries.

What large river empties into the Atlantic between the parallels of 30° and 40°? What two rivers unite and form the La Plata? Which is the longest river, the Parana or the Uruguay? What river empties into the Parana from the north? What two rivers, rising in the Andes, empty into the Paraguay?

Which is the largest political division of South America? What part of the grand division does Brazil occupy? What two divisions north of Brazil? What division west of Venezuela? On what waters does Columbia border?

What division south of Columbia? What division south of Ecuador? What division south-east of Peru? What division south of Bolivia borders on the Pacific? What division east of Chili?

What mountains divide the Argentine Republic from Chili? What division south of Brazil borders on the La Plata? What division is inclosed between Brazil and the Argentine Republic?

What divisions border on the Atlantic? What divisions border on the Pacific? What divisions have no sea-board? What divisions bound Brazil on the north, west, and south?

Name and locate the capital of each division.

DESCRIPTION.

I. POSITION.

1. **South America** is the southern part of the western continent. It has an area of nearly 7,000,000 square miles.

2. The most northern point is *Cape Gallinas;* the most southern is *Cape Horn,* on a small rocky island south of Tierra del Fuego; and the most western is *Cape Parina.*

3. The northern coast of the grand division, from the Isthmus of Panama to Cape Branco, is washed by the Caribbean Sea and the Atlantic Ocean; the eastern, from Cape Branco to Cape Horn, by the Atlantic Ocean; and the western, from the Isthmus of Panama to Cape Horn, by the Pacific Ocean.

4. The principal islands belonging to South America are: *Trinidad,* between the Caribbean Sea and the Atlantic Ocean; *Tierra del Fuego,* or *Fireland,* south of Magellan Strait; the *Falkland Islands,* north-east of Cape Horn; and the *Galapagos Islands,* west of the grand division, on the equator.

II. SURFACE.

5. South America has three great highland systems: (1) The Andes; (2) the Plateau of Guyana; and (3) the Table-land of Brazil.

6. The **Andes** traverse the western part of the grand division from the northern to the southern extremity. They are the second mountain system of the world in regard to elevation, being surpassed only by the Himalaya in Asia.

7. The southern part of the Andes consists of a single elevated range. The middle part forms a broad table-land, surrounded by lofty chains. It is nearly twice as high as Mt. Washington, and contains *Lake Titicaca.* The northern part consists of two, and in some sections of three parallel ranges, which inclose long and narrow valleys of great elevation.

8. The highest peaks and volcanoes which crown the crests of the Andes are covered with perpetual snow. *Aconcagua,* east of Santiago, is the loftiest summit on the continent, and rises nearly five miles above the level of the sea. *Chimborazo* and *Cotopaxi* are near the equator.



Animals of South America.

9. The **Plateau of Guyana,** in the north-eastern part of the grand division, is traversed by many mountain chains.

The **Table-land of Brazil** occupies nearly one fourth of the grand division. It is lower than the Plateau of Guyana. The principal mountain chains which traverse it are parallel to the coast. The Sierra de Mantiqueira is the highest of these.

10. The interior of the grand division consists of vast low plains. They separate the three highland regions, and, although they are connected with each other, they are divided into three sections.

(1) The *Llanos* lie north and west of the Plateau of Guyana, and are traversed by the Orinoco River.

(2) The *Selvas*, or *Forests*, lie between the Plateau of Guyana and the Table-land of Brazil, and are traversed by the Amazon River.

(3) The *Pampas* lie south of the Selvas, between the Table-land of Brazil and the Andes. They are traversed by the La Plata and some of its tributaries.

QUESTIONS.—1. What is the area of South America?—2. Where is Cape Gallinas? Cape Horn? Cape Parina?—3. What waters wash the northern coast? What ocean, the eastern coast? What ocean, the western coast?—4. Where is the island of Trinidad? Tierra del Fuego? What strait between this island and the grand division? Where are the Falkland Islands? The Galapagos Islands?

5. Name the three great highland systems of South America.—6. Where are the Andes?—7. Describe the southern part. The middle part. The northern part.—8. What is the highest peak of the Andes? Where is Aconcagua? Chimborazo? Cotopaxi?

9. Where is the Plateau of Guyana? The Table-land of Brazil?—10. Where are the Llanos? The Selvas? The Pampas?

III. RIVERS AND LAKES.

11. South America is noted for its large rivers. The *Magdalena* empties into the Caribbean Sea. It drains the northern part of the Andes. The *Orinoco* rises in the Plateau of Guyana, flows through the Llanos, and empties into the Atlantic Ocean.

12. The *Amazon* is the largest river on the globe. Its upper course flows north-west between two chains of the Andes, in a high valley. Near the 5th degree of south latitude, it turns to the east, flows through the Selvas, and empties into the Atlantic Ocean. The *Rio Negro*, the *Ucayale*, the *Madeira*, the *Xingu*, and the *Tocantins* are its principal tributaries.

The *La Plata* is formed by the junction of the *Uruguay* and the *Parana*, which rise in the Table-land of Brazil. The *Paraguay* is the largest tributary of the Parana.

13. *Lake Titicaca* lies on a plateau of the middle Andes. *Lake Maracaybo* lies near the coast of the Caribbean Sea, with which it is connected by the Gulf of Venezuela.

IV. CLIMATE, VEGETATION, AND ANIMALS.

14. Three fourths of South America lie in the torrid zone; the southern part only lies in the temperate zone. The highest regions of the Andes alone have a cold climate.

15. Abundant rains fall on those portions of South America which lie east of the Andes. Hence, the vegetation is very luxuriant.

The Llanos and Pampas are covered with grasses and shrubs, and somewhat resemble our prairies. The Selvas and the eastern part of the Table-land of Brazil are covered with tropical forests, consisting of *palms*, *tree-ferns*, and numerous other plants, which require much heat and moisture.

16. The principal animals of South America are: the *jaguar* and *cougar*, of the cat species; the *tapir*, a thick-skinned animal; the *ant-eater*, the *sloth*, and the *boa-constrictor*. The *llama* and *alpaca*, which correspond to the camel of the old world, and the *condor*, the largest kind of vulture known, are peculiar to the Andes. The llama is domesticated, and used as a beast of burden.

V. INHABITANTS AND STATES.

17. South America has about 30,000,000 inhabitants. One third of these belong to the white race, and are descendants of Spanish and Portuguese settlers; one third are Indians; and one third are Negroes and Mulattoes.

18. There are thirteen political divisions in South America. Nine of these are republics; Brazil is an empire; French, Dutch, and British Guyana belong to European states. Patagonia belongs to Chili and Argentine Republic.

QUESTIONS.—11. Where does the Magdalena empty? Describe its course. Describe the Orinoco.—12. Describe the Amazon. The Rio Negro. The Ucayale. The Madeira. The Xingu. The Tocantins. The La Plata. The Parana. The Uruguay. The Paraguay.—13. Where is Lake Titicaca? Lake Maracaybo?

14. What portion of South America lies in the torrid zone? What portion in the temperate zone?—15. What is said of the climate in regard to moisture? What is said of the vegetation of the Llanos and Pampas? Of the Selvas? Of the eastern part of the Brazilian table-land?—16. Name some animals of South America.

17. What is the number of inhabitants? To what races do they belong?—18. How many political divisions in South America? How many are republics? What one is an empire? What three belong to European states? What is said of Patagonia?



A Galera on the Pampas.

VI. STATES AND CITIES.

19. The **Empire of Brazil** occupies the eastern part of South America, and is nearly as large as the United States, including Alaska. It has but one fourth as many inhabitants.

20. It embraces the table-land of Brazil and the larger part of the Selvas of the Amazon.

21. The mineral products are gold, platinum, and diamonds. The agricultural products are coffee, sugar, rice, Indian corn, tobacco, cotton, and bananas. Coffee, sugar, dye-woods, and diamonds are the principal articles of export.

22. *Rio Janeiro* is the capital. It has a fine harbor, and is one of the most beautiful cities of South America. *Bahia* is an important sea-port.

23. **Guyana** occupies the eastern part of the Plateau of Guyana, and the fertile, but unhealthy coast plain. Coffee, sugar, and cotton are the principal productions.

This country consists of three colonies: *French Guyana,* in the east; *Dutch Guyana,* in the center; and *British Guyana,* in the west.

24. The following nine states are republics. Their white inhabitants are chiefly of Spanish descent:

Venezuela borders on the Caribbean Sea. It includes the western part of the Plateau of Guyana and the Llanos of the Orinoco. Coffee, tobacco, cacao, and cotton are the principal products. *Caracas* is the capital. *La Guayra* is the sea-port.

25. **Columbia** lies west of Venezuela. It embraces the northern part of the Andes and the Isthmus of Panama. Sugar, coffee, and other tropical products are cultivated to a limited extent. *Bogota* is the capital.

26. **Ecuador** lies south of Columbia. Vanilla, cacao, and the bark of the *cinchona tree,* which yields quinine, are the principal articles of export. *Quito* is the capital.

27. **Peru** lies south of Ecuador, and is traversed by the Andes. The upper course of the Amazon flows through this country. Its wealth consists in silver and copper mines. *Lima,* the capital, is a beautiful and wealthy city. *Callao* is the principal sea-port.

28. **Bolivia** includes the broadest portion of the Andes and a part of the plateau which contains Lake Titicaca. Its mines produce silver and gold. *Sucre* is the capital.

29. **Chili** occupies the western slope of the Andes from the latitude of 16° south to Cape Horn. It exports wheat, copper, gold, and silver. *Santiago* is the capital. *Valparaiso* is the principal sea-port.

30. The **Argentine Republic** occupies the eastern slope of the continent from the tropic of Capricorn to Cape Horn. Hides, leather, tallow, and preserved beef are the principal articles of export. *Buenos Ayres* is the capital.

31. **Uruguay** lies south of Brazil. Grazing is the principal occupation, and hides, leather, and preserved beef are the chief articles of export. *Montevideo* is the capital.

32. **Paraguay** is inclosed between Brazil, Bolivia, and the Argentine Republic. Agriculture and stock-raising are the chief occupations. *Assumption,* on the Paraguay River, is the capital.

QUESTIONS.—19. Bound Brazil. What is said of its extent?—20. What natural regions does it include?—21. Name the mineral products. The agricultural products.—22. What and where is the capital? Where is Bahia?

23. Bound Guyana. Describe the surface. Into what three colonies is it divided? Bound each of the following states, describe the surface, name the products, the capital, and such other towns as have been mentioned:

24. Venezuela. 25. Columbia. 26. Ecuador. 27. Peru. 28. Bolivia. 29. Chili. 30. Argentine Republic. 31. Uruguay. 32. Paraguay.

MAP DRAWING.

MAP OF SOUTH AMERICA.

1. Draw seven horizontal and five vertical lines, as in the annexed figure. You thus obtain a rectangle, which is divided by the lines into twenty-four equal squares.

2. Point A is a corner of the left-hand upper square. It marks Cape Gallinas, the northern extremity of the grand division. Point B is one third of the side of a square above point C, which is at the corner of a square. Point B marks Cape St. Roque.

3. Point D is the center of the side of a square. Point E is the lower end of the same vertical line, the upper end of which marks Cape Gallinas.

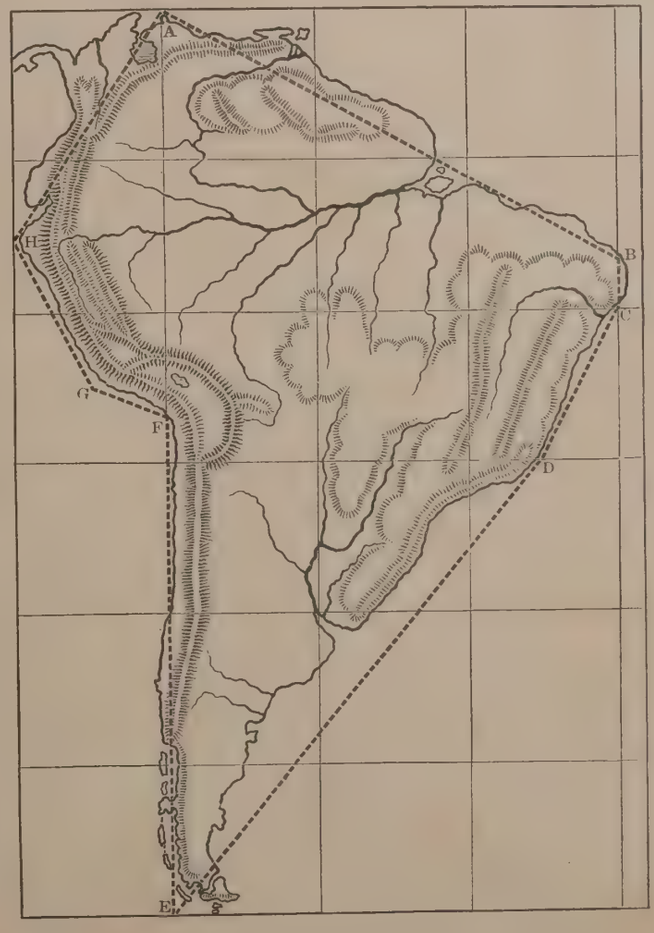
4. Point F is one third of the side of a square above the same horizontal line in which is point D. Point G is the center of a square, and point H is the center of the side of a square. Point F marks the inner angle of the Bay of Arica. Point H marks Cape Parina. The Gulf of Guayaquil is north of point H.

5. Connect these points by straight lines. You thus construct the fundamental figure of the grand division. Cape Horn is one third of the side of a square to the east of point E.

6. Draw the shore-line of South America. Observe the Gulf of Venezuela west of point A, the mouth of the Amazon near the corner of a square, and the mouth of the La Plata near the corner of another square. Draw the principal rivers and the mountain systems. Locate the largest cities, and letter the map.

The Andes should be shaded much darker than the Brazilian Mountains and the other lower systems.

7. The side of a square is about 800 miles. The length of the continent from north to south is 6×800, or about 4800 miles; the width, from east to west, is 4×800, or 3200 miles.




PHYSICAL and POLITICAL
MAP OF
EUROPE
BY
A von Steinwehr, A. M.
Scale of Statute Miles.
0 50 100 200 300 400 500
Pennsylvania
46,000 sq. mls.
REFERENCES:
Capital Cities.
Volcanoes.
West of Greenwich.
East of Greenwich.
East of Washington.
ARCTIC OCEAN
ATLANTIC OCEAN
BRITISH ISLS.
NORTH SEA
BALTIC SEA
BLACK SEA
CASPIAN SEA
MEDITERRANEAN SEA
Kara Sea
Nova Zembla
North Cape
Arctic Circle
ICELAND
Mt. Hekla
Mt. Oræfa
Geyser
FINLAND
SWEDEN
NORWAY
LAPLAND
RUSSIA
The Tundra
Ural Mountains
Archangel
White S.
Moscow
St. Petersburg
Stockholm
Christiania
Bergen
Trondhjem
Helsingfors
Abo
Aland Is.
Gefle
Upsala
Wetter L.
Wener L.
Ladoga L.
Onega L.
Dvina R.
Volga R.
Kama R.
Petchora R.
Obi R.
Yenisei R.
Lena R.
Siberia
Ekaterinburg
Perm
Nizhnei Novgorod
Kazan
Samara R.
Orenburg
Land of the Orenburg Kirghiz
Caspian Depression
Astrachan
Caucasus Mountains
Mt. Elbrooz
Mt. Kasbek
Mt. Ararat
Derbent
Baku
Tiflis
Kutais
Batum
Trebizond
Sinope
Samsun
Angora
Smyrna
Constantinople
Scutari
Adrianople
Philippopole
Sophia
Varna
Shumla
Danube R.
Balkan Mts.
Rhodope Mts.
Marmora
Dardanelles
Lemnos
C. Baba
Mytilene
Chios
Rhodes
Cyprus
Crete
Candia (Ty.)
or Creta
Cerigo
C. Matapan
Morea
GREECE
Athens
Thessaly
Olympus Mt.
Salonica
Janina
Larissa
Corfu
Cephalonia
Zante
Ionian Is.
Gulf of Lepanto
Gulf of Corinth
Gulf of Taranto
Gulf of Venice
Gulf of Lyons
Gulf of Genoa
Gulf of Finland
Gulf of Bothnia
Gulf of Riga
Sea of Azov
Strof Kertch
Crimea
Sevastopol
Eupatoria
Odessa
Kherson
Nicolaief
Kishenau
Jassy
Bucharest
Roumania
Servia
Belgrade
Widin
Bosnia
Serajevo
Cattaro
Montenegro
Austria
Vienna
Trieste
Venice
Turin
Milan
Florence
Rome
Naples
Mt. Vesuvius
Sardinia
Corsica
Ajaccio
Bastia
Elba
Balearic Is. (Sp.)
Minorca
Majorca
Ivica
Spain
Portugal
Madrid
Lisbon
Barcelona
Saragossa
Valencia
Seville
Granada
Sierra Nevada
Sierra Morena
Cadiz
Gibraltar
Malaga
Cartagena
Algiers
Oran
Bona
Tunis
Morocco
Fez
Ceuta
Tangier
Malta (Br.)
Palermo
Messina
Mt. Etna
Catania
Sicily
Pantellaria
C. Bon
C. de Gata
C. St. Vincent
C. Finisterre
C. Ortegal
C. Clear
C. Wrath
C. Stadtland
C. Kanin
Lands End
Scilly Is.
Valencia Harbour
Hebrides Is.
Orkney Is.
Shetland Is. (Br.)
Faroe Is. (Danish)
Iceland
Lofoden Is.
Dover Field
Sneehatten
Hardanger Field
Sogne Fjord
Hardanger Fjord
Stavanger
Christiansand
The Naze
Skager Rack
Cattegat
Sound
Copenhagen
Bornholm
Rügen
Kiel
Lubeck
Hamburg
Bremen
Hanover
Berlin
Dantzic
Konigsberg
Memel
Mittau
Dunaburg
Vilna
Minsk
Pinsk
Warsaw
Poland
Lublin
Cracow
Lemberg
Prussia
Posen
Thorn
Stettin
Frankfort
Magdeburg
Leipzig
Dresden
Breslau
Prague
Bohemia
Carlsruhe
Nuremberg
Munich
Stuttgart
Strasbourg
Metz
Nancy
Frankfort
Cologne
Elberfeld
Brussels
Antwerp
Belgium
Amsterdam
The Hague
Rotterdam
Helder
Zuyder Zee
Utrecht
Arnheim
Switzerland
Berne
Geneva
Mt. Blanc
Grutz
Buda-Pesth
Szegedin
Hermannstadt
Temesvar
Transylvanian Alps
Maros R.
Save R.
Drave R.
Danube R.
Theiss R.
Pruth R.
Dniester R.
Bug R.
Dnieper R.
Don R.
Volga R.
Kama R.
Oka R.
Desna R.
Pripet R.
Berezina R.
Niemen R.
Duna R.
Vistula R.
Oder R.
Elbe R.
Weser R.
Rhine R.
Main R.
Moselle R.
Meuse R.
Seine R.
Loire R.
Garonne R.
Dordogne R.
Rhone R.
Po R.
Adige R.
Arno R.
Tiber R.
Ebro R.
Douro R.
Tagus R.
Guadiana R.
Guadalquiver R.
Segura R.
Xucar R.
Pyrenees Mts.
Cevennes Mts.
Jura Mts.
Alps
Apennines
Carpathian Mts.
Tatra Mts.
Sudetes Mts.
Hartz Mts.
Riesen Mts.
Bohemian Forest
Black Forest
Vosges Mts.
Ardennes
Dovrefjeld
Kiolen Mts.
Lapland Mts.
Ural Mts.
Valdai Hills
Timan Hills
Obtchei Syrt
Ergeni Hills
Caucasus Mts.
Taurus Mts.
Balkan Mts.
Rhodope Mts.
Olympus Mt.
Pindus Mts.
Morea Mts.
Sierra Morena
Sierra Nevada
Atlas Mts.
Lake Wener
Lake Peipus
Lake Ilmen
Lake Onega
Lake Ladoga
Lake Enara
Lake Imandra
Lake Kulmo
Lake Kolozero
Lake Kolmen
Lake Wetter
Lake Vetter
Lake Mälar
Lake Constance
Lake Geneva
Lake Como
Lake Garda
Lake Maggiore
Lake Trasimene
Lake Albano
Lake Nemi
Lake Bolsena
Lake Orbetello
Lake Fucino
Lake Agnano
Lake Averno
Lake Lucrino
Lake Avernus
Lake Maremma
Lake Thrasymene
Lake Bracciano
Lake Vico

EUROPE.

MAP QUESTIONS.—What ocean north of Europe? What ocean west? What sea south? What mountain chain and river bound Europe on the east? What sea indents the northern coast? What sea east of the British Islands? What waters extend from the North Sea to the east? What large peninsula between the Baltic Sea and the ocean?

What channel south of England? What bay north of Spain? What strait connects the Atlantic Ocean with the Mediterranean Sea? What sea between Italy and Austria? What sea east of Greece? What sea north-east of the Archipelago?

What part of Europe is a low plain? In what part are the principal mountain systems? What mountains north of Italy? What mountain chain north of Spain? What mountains traverse Italy? What mountains traverse Turkey?

What river empties into the Arctic Ocean? What rivers into the White Sea? What large lakes in western Russia? Name some rivers emptying into the Gulf of Bothnia. Name some rivers emptying into the Baltic from the east and south. Name two rivers emptying into the south-eastern part of the North Sea. Name two rivers emptying into the Bay of Biscay. Name some rivers in Spain emptying into the Atlantic Ocean.

What river in France empties into the Mediterranean Sea? What river in Italy empties into the Adriatic Sea? What rivers empty into the Black Sea? What rivers empty into the Caspian Sea?

What five states occupy the Turkish peninsula? What one, the Italian peninsula? What two, the Spanish peninsula? What two, the Scandinavian peninsula? What state includes the British Islands (Great Britain)? What state occupies the peninsula and the islands west of the Baltic Sea?

[The pupil will observe that the twelve states he has just named occupy the peninsulas and larger Islands of Europe. The remaining states occupy the continent proper.]

What large state occupies the eastern part of Europe? What state in the western part lies south of England? What state between Russia, Austria, and France borders on the North and Baltic seas?

What state south-east of the German Empire borders on the Adriatic Sea? What state lies between France, Germany, Austria, and Italy? What two small states west of northern Germany? What island south-east of France? What island south of Corsica belonging to Italy? Name and locate the capital of each state.

DESCRIPTION.

I. POSITION.

1. **Europe** comprises the north-western part of the eastern continent. On the east, it is joined to Asia. The boundary is formed by the Ural Mountains, the Ural River, the Caspian Sea, the Caucasus Mountains, and the Black Sea.

2. The outline of Europe is very irregular. No other grand division is so deeply indented by large bays and gulfs, or has so many peninsulas.

3. The *White Sea* extends from the Arctic Ocean, which washes the northern shores. The Atlantic Ocean washes the western shores. A series of branches extends into the northern part of the grand division, as the *North Sea*, east of the British Isles, the *Cattegat*, the *Baltic Sea*, the *Gulf of Bothnia*, and the *Gulf of Finland*. The *Scandinavian peninsula* lies west of the Baltic Sea and the Gulf of Bothnia.

4. The southern shores are washed by the *Mediterranean Sea*, which also extends from the Atlantic Ocean. The *Adriatic Sea*, east of Italy, the *Archipelago*, east of Greece, the *Sea of Marmora*, the *Black Sea*, and the *Sea of Azov* are extensions of the Mediterranean. The *Spanish*, *Italian*, and *Turkish peninsulas* are in the south of Europe.

5. Europe has an area of 3,900,000 square miles, and is but little larger than the United States.

II. SURFACE.

6. In regard to surface, Europe is divided into two parts. The south-western part is mountainous; the north-eastern, is a vast low plain. The boundary between the two is roughly marked by a line from the mouth of the Danube to the mouth of the Rhine. The only mountain system lying north of this line is that of the Scandinavian peninsula.

7. The great low plain of Europe embraces Russia and northern Germany. It extends from the Ural Mountains to the North Sea, and from the Arctic Ocean to the Black Sea.

8. The *Alps* are the highest mountain system of Europe. They extend in a curve from the shores of the Mediterranean Sea to the Danube River, and lie north of the Italian peninsula. The Alps are surrounded by numerous lower mountain systems.

III. RIVERS AND LAKES.

9. The largest river in Europe is the *Volga*. It flows through the great eastern plain and empties into the Caspian Sea. This sea has no outlet into the ocean.

The *Danube* is the second river in size. It rises in the western part of Germany, has an easterly course, and empties into the Black Sea.

10. The largest lakes of Europe are situated in the region which surrounds the Baltic Sea; as *Lake Ladoga* and *Lake Onega*, in Russia; and *Lake Mœlar*, *Lake Wener*, and *Lake Wetter*, in Sweden. A large number of lakes lie near the base of the Alps.

QUESTIONS.—1. What part of the eastern continent does Europe comprise? To what grand division is it joined in the east? Describe the boundary between Europe and Asia.—2. What is said of the outline?—3. Where is the White Sea? The North Sea? The Cattegat? The Baltic Sea? The Gulf of Bothnia? The Gulf of Finland? The Scandinavian peninsula?

4. Where is the Mediterranean Sea? The Adriatic Sea? The Archipelago? The Sea of Marmora? The Black Sea? The Sea of Azov? The Spanish peninsula? The Italian peninsula? The Turkish peninsula?—5. What is the area of Europe?

6. What is the surface of the south-western part of the grand division? Of the north-eastern part? What line marks the boundary between the low plain and the mountainous region? What mountain system lies north of this boundary?—7. Describe the extent of the great low plain.—8. What is said of the Alps?

9. What is the largest river of Europe? Where does the Volga empty? Where does the Danube rise? Where does it empty?—10. In what region are the largest lakes? Where is Lake Ladoga? Lake Onega? Lake Mœlar? Lake Wener? Lake Wetter?



Lake Como, in northern Italy.

IV. CLIMATE AND VEGETATION.

11. The greater part of Europe lies in the temperate zone; the northern extremity only is in the frigid zone.

12. In *southern* Europe the winter is mild, the spring pleasant, and the summer hot. Olives, almonds, and figs are grown.

In *central* Europe the winter is severe, the spring cool, and the summer warm. The forests consist of oaks, elms, chestnuts, and beeches. Fruit-trees, cereals, tobacco, and garden vegetables are cultivated.

In *northern* Europe there is a long and severe winter, and a short, warm summer. Pine forests occupy extensive tracts; oats, barley, and potatoes are raised in the warmer parts.

13. The principal wild animals of Europe are: the *polar bear* and the *reindeer*, in the north; the *wolf*, in Russia; the *stag*, the *deer*, the *hare*, and the *fox*, in the south. The *chamois* is found in the Alps.

V. INHABITANTS AND STATES.

14. Europe is the most densely populated grand division, and has 333,000,000 inhabitants, belonging chiefly to the *Aryan branch* of the Caucasian race. The nations of this branch are classed under four groups:

(1) The *Germanic nations*, including the English, the Germans, the Danes, the Dutch, the Swedes, and the Norwegians.

(2) The *Romanic nations*, including the French, the Italians, the Spaniards, the Portuguese, and the Greeks.

(3) The *Slavonic nations*, including the Russians, the Poles, and many others of less importance.

(4) The *Celts*, including the Irish and the Highland Scotch.

15. The Jews are the only *Semitic* nation of Europe. The Hungarians, the Turks, and some small tribes living in Russia belong to the *Mongolian race*.

16. Europe is divided into nineteen independent states, but these are very unequal in extent and in population. Austria, France, Germany, Great Britain, and Russia are called the "Five Great Powers."

Russia, Austria, Germany, and Turkey are empires. France and Switzerland are republics. England, Norway, Sweden, Denmark, Holland, Belgium, Spain, Portugal, Italy, Greece, Roumania, and Servia are kingdoms. Montenegro is a principality.

QUESTIONS.—11. In what zone does the greater part of Europe lie?—12. What is said of the climate of southern Europe? Of central Europe? Of northern Europe?—13. Name some wild animals of Europe.

14. What is the population? To what branch of the Caucasian race do the inhabitants chiefly belong? Name the Germanic nations. The Romanic nations. The Slavonic nations. The Celts.—15. What people are Semitic? What nations belong to the Mongolian race?

16. Into how many independent states is Europe divided? In what respects do they differ? Which states are called the "Five Great Powers"? Name the four empires. What two states are republics? Name the twelve kingdoms. The independent principality.

THE EMPIRE OF RUSSIA.

17. Russia occupies the north-eastern part of Europe. The surface is level, as it includes most of the great European low plain. The *Ural Mountains* trend along the eastern boundary; the *Caucasus Mountains* form part of the southern.

18. Large rivers are numerous. The *Volga* and the *Ural* empty into the Caspian Sea; the *Don*, into the Sea of Azov; the *Dnieper*, into the Black Sea; the *Niemen* and *Duna*, into the Baltic Sea; the *Dwina*, into the White Sea; and the *Petchora*, into the Arctic Ocean.

19. The region bordering upon the Black and Caspian seas consists of extensive *steppes*, which resemble our prairies. The central parts of the country are covered with extensive pine forests; the northern part, with mosses.

20. Agriculture is the chief occupation of the inhabitants. Wheat, flax, and hemp are the principal products. The government is an absolute monarchy, under an emperor, or *czar*.



Statue of Peter the Great at St. Petersburg.

21. *St. Petersburg*, the capital, is situated at the mouth of the river Neva, which drains the large Lake Ladoga.

Moscow, in the interior, has important manufactories and an extensive commerce. *Niznei Novgorod*, on the Volga, *Astrachan*, at the mouth of the Volga, *Odessa*, on the Black Sea, *Riga*, on the Baltic Sea, and *Warsaw*, on the Vistula, are the chief cities.

THE KINGDOMS OF SWEDEN AND NORWAY.

22. These two kingdoms occupy the Scandinavian peninsula. The western part of this peninsula is a mountainous plateau with many lofty peaks; the eastern part is a low plain.

23. The principal rivers empty into the Baltic Sea and its branches. The *Tornea*, forming part of the boundary between Sweden and Russia, and the *Dal*, are the most important.

24. The climate is very cold, particularly in the north. The principal crops are barley, rye, oats, flax, and potatoes. The extensive pine forests yield much valuable timber, which is largely exported. Iron, copper, and lead are mined.

25. The two kingdoms are constitutional monarchies, and are governed by the same king, though each has its own legislature.

Stockholm, the capital of Sweden, is situated at the outlet of Lake Mælar. *Christiania* is the capital of Norway.

QUESTIONS.—17. Bound Russia. Describe the surface. Where are the Ural Mountains? The Caucasus Mountains?

18. Describe the Volga. The Ural. The Don. The Dnieper. The Niemen. The Duna. The Dwina. The Petchora.—19. In what part are extensive steppes? What forests are in the central part? What is said of the northern part?

20. Name the agricultural products. The mineral products. What is the government?—21. What and where is the capital? Where is Moscow? Niznei Novgorod? Astrachan? Odessa? Riga? Warsaw?

22. Where are Sweden and Norway? Describe the surface.—23. Describe the Tornea River. The Dal River.—24. What is said of the climate? Name the agricultural products. The minerals.—25. What is said of the government? What is the capital of Sweden? Of Norway?

MAP DRAWING.

MAP OF EUROPE.

1. Draw four horizontal and five vertical lines, as in the annexed figure, forming a rectangle, which is divided into twelve squares.

2. Point A is a corner of the square at the right upper corner. Draw a line through the center of the side of a square at Q; then draw a vertical line one third to the left of the right-hand vertical line, half way through the lower square to C. Point B is the intersection of this line with A Q.

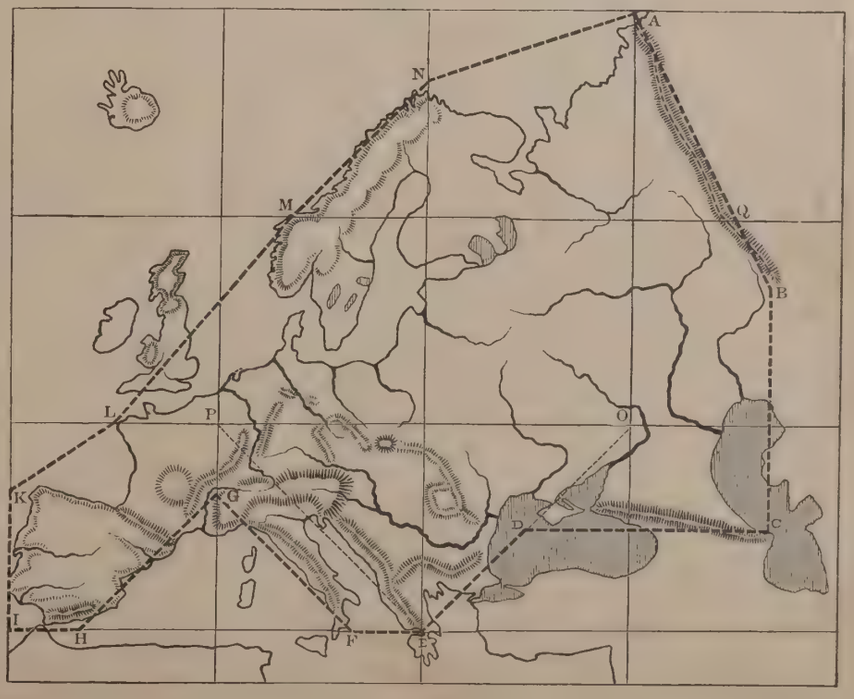
3. Draw a horizontal line through C: point D is at the intersection of this line with the diagonal O E. Point F is one third of the side of a square to the left of E. To find points G, H, and K, trisect the sides of the left-hand lower square.

4. Point L is the center of the side of a square. To find points M and N, trisect the sides of the square. Connect the points from A to N by straight lines, and you thus construct the fundamental figure of Europe.

5. The line A B marks the Ural Mountains. Point C marks the eastern end of the Caucasus Mountains. The diagonal E P marks the direction of the Adriatic Sea, and the line F G the western coast of Italy. Point L marks the western extremity of France, and the line M N the coast of Norway.

6. Draw the outline, the rivers, and the principal mountains. Locate the principal cities, and letter the map.

The side of a square is equal to 865 miles. Hence, the distance from the Caspian Sea to the western extremity of Portugal is $3\frac{2}{3} \times 865$, or about 3172 miles.




MAP OF
WESTERN AND CENTRAL
EUROPE
By A. von Steinwehr.
Scale of Statute Miles.
0 25 50 75 100 200
1000 Sq. Mls.
15 West of Greenwich. 10
5
0
5 East of Greenwich. 10
15
20
25
30
35
55
50
45
40
35
72
77
East of Washington.
82
87
92
97
102
NORTH SEA
BALTIC SEA
ATLANTIC OCEAN
ENGLISH CHANNEL
BAY OF BISCAY
MEDITERRANEAN SEA
BLACK SEA
NORWAY
SWEDEN
DENMARK
RUSSIA
PRUSSIA
BERLIN
GERMANY
HOLLAND
BELGIUM
FRANCE
PARIS
LONDON
SCOTLAND
IRELAND
Dublin
Belfast
Edinburgh
Glasgow
Liverpool
Manchester
Birmingham
Leeds
Sheffield
Hull
Newcastle
Sunderland
Norwich
Plymouth
Portsmouth
Bristol
Brighton
Dover
Hull
Hamburg
Bremen
Amsterdam
The Hague
Antwerp
Brussels
Cologne
Frankfort
Dresden
Leipzig
Berlin
Stettin
Breslau
Warsaw
Posen
Dantzic
Konigsberg
Memel
Riga
Mittau
Dunaburg
Vilna
Minsk
Grodno
Pinsk
Kiev
Lublin
Cracow
Lemberg
Tarnopol
Dniester R.
Dnieper R.
Bug R.
Pripet R.
Desna R.
Tchernigov
Orel
Kaluga
Tula
Moscow
Smolensk
Mohilev
Vitebsk
Pskov
Peipus L.
Ilmen L.
Valdai Hills
Tver
Volga R.
Oka R.
Duna R.
Niemen R.
Vistula R.
Warthe R.
Oder R.
Elbe R.
Rhine R.
Weser R.
Ems R.
Meuse R.
Moselle R.
Saone R.
Rhone R.
Seine R.
Loire R.
Garonne R.
Dordogne R.
Gironde R.
Po R.
Arno R.
Tiber R.
Danube R.
Save R.
Drave R.
Theiss R.
Maros R.
Aluta R.
Sereth R.
Pruth R.
Jassy
Kishenau
Czernowitz
Odessa
Sebastopol
Eupatoria
Nikolaiev
Kherson
Perekop
Crimea
Sea of Azof
Taganrog
Don R.
Kuban R.
Caucasus Mts.
Black Sea
Constantinople
Sea of Marmora
Bosporus
Scutari
Adrianople
Philippopolis
Maritza R.
Balkan Mts.
Sofia
Nicopolis
Plojeshti
Bucharest
Silistria
Rustchuk
Danube R.
Orsova
Belgrade
Servia
Bosnia
Serajevo
Dalmatia
Adriatic Sea
Venice
Trieste
Agram
Laibach
Gratz
Vienna
Presburg
Pesth
Buda
Debretzin
Klausenburg
Gross Wardein
Hermannstadt
Kronstadt
Braila
Galatz
Temesvar
Szegedin
Kecskemet
Lake Balaton
Austria
Hungary
Transylvania
Carpathian Mts.
Olmutz
Brunn
Kaschau
Munich
Ratisbon
Nuremberg
Pilsen
Carlsruhe
Stuttgart
Mentz
Metz
Nancy
Strasbourg
Basle
Zurich
Berne
Switzerland
Alps
Innsbruck
Milan
Turin
Genoa
Nice
Gulf of Genoa
Leghorn
Florence
Ancona
San Marino
Bologna
Parma
Verona
Mantua
Apennine Mts.
Rome
Naples
Mt. Vesuvius
Salerno
Capri
Brindisi
Taranto
Gulf of Taranto
Italy
Sardinia
(Italian)
Corsica
(French)
Elba
Leghorn
Mt. Gran Sasso
Montenegro
Antivari
Scutari
Janina
Salonica
Larissa
Thessaly
Pindus Mts.
Strait of Otranto
Ionian Sea
Greece
Morea
Patras
Athens
Cephalonia
Zante
Cyclades
Archipelago
Asia Minor
Smyrna
Mytilene
Chios
Lemnos
Rhodes
Candia
Mt. Etna
Messina
Palermo
Sicily
Strait of Messina
Malta (British)
C. Passaro
C. Matapan
C. Leuca
C. Bon
Tunis
Algiers
Oran
Morocco
Algeria
Tunis
(To France)
Gibraltar (British)
Strait of Gibraltar
Tangier
C. de Gata
Malaga
Cadiz
Seville
Granada
Sierra Nevada
Cartagena
Murcia
Valencia
Majorca
Minorca
Balearic Is.
Iviza
C. Nao
C. Creux
Barcelona
Saragossa
Pamplona
Madrid
Toledo
Cuenca
Sierra Morena
Badajoz
Evora
Setuval
Lisbon
Tagus R.
Guadiana R.
Guadalquivir R.
Cordova
Jucar R.
Ebro R.
Douro R.
Oporto
Braga
Coimbra
Portugal
Spain
Pyrenees Mts.
Andorra
Narbonne
Toulouse
Montpellier
Nimes
Avignon
Marseilles
Toulon
Gulf of Lyons
Cevennes Mts.
Auvergne Mts.
Jura Mts.
Vosges Mts.
Black Forest
Hartz Mts.
Bohemian Forest
Erzgebirge
Riesengebirge
Sudetes Mts.
Carpathian Mts.
Lyons
Grenoble
St. Etienne
Clermont
Limoges
Rochefort
Poitiers
Tours
Orleans
Le Mans
Nantes
Angers
Bourges
Troyes
Rheims
Sedan
Luxemburg
Amiens
Quentin
Rouen
Havre
Dieppe
Caen
Cherbourg
Channel Is. (Brit.)
Brest
Rennes
Versailles
Lille
Calais
Boulogne
Ostend
Liege
Aix la Chapelle
Coblentz
Cassel
Munster
Barmen
Gotha
Halle
Leipzig
Gorlitz
Dresden
Frankfort
Hanover
Brunswick
Magdeburg
Posen
Kalish
Bromberg
Graudenz
Thorn
Marienwerder
Elbing
Konigsberg
Pillau
Memel
Courland
Livonia
Esthonia
Gulf of Riga
Dagoe
Oesel
Arensburg
Hapsal
Reval
Narva
Peipus L.
Dorpat
Pskov
Valdai Hills
Tver
Moscow
Smolensk
Mohilev
Vitebsk
Minsk
Grodno
Bialystok
Brest Litovsk
Pinsk
Kiev
Tchernigov
Orel
Kaluga
Tula
Kursk
Kharkov
Poltava
Ekaterinoslav

WESTERN AND CENTRAL EUROPE.

Int. 11.

MAP QUESTIONS.—What ocean west of this section? What two seas north? What sea south? What strait connects the Atlantic Ocean with the Mediterranean Sea? What branch of the Mediterranean between Italy and Austria?

What branch between Greece and Asia Minor? What sea north-east of the Archipelago? What sea north-east of the Sea of Marmora? What strait between the Archipelago and the Sea of Marmora? What strait between the Sea of Marmora and the Black Sea?

What cape at the southern extremity of Greece? What island south of Italy? What cape at its southern end? What bay between France and Spain? What channel between France and England? What strait connects the English Channel with the North Sea? What waters between the North Sea and the Baltic Sea? What sea between Great Britain and Ireland? What channel south of the Irish Sea? What cape is the north-western end of Scotland? The south-western end of Ireland? The south-western end of England?

What mountain system north of Italy? What mountains west of the Alps? Name some mountains north of the Alps. What mountains north-east of the Alps? What mountains between France and Spain? What mountains west of the Pyrenees?

What mountains in southern Spain? What mountains pass through Italy? What mountains in Turkey? What mountains in Scotland?

What two rivers empty into the Baltic Sea? What two rivers in Germany empty into the North Sea? What river in Holland empties into the North Sea? What river in France empties into the English Channel? What two rivers empty into the Bay of Biscay? What river in France empties into the Mediterranean Sea?

Name three rivers of the Spanish Peninsula which empty into the Atlantic Ocean. What two rivers in Spain empty into the Mediterranean Sea? What river empties into the northern part of the Adriatic Sea?

What two rivers empty into the Archipelago? What large river empties into the Black Sea? Where does the Danube rise? Name two southern tributaries of the Danube. Name a northern tributary.

What river in southern England empties into the North Sea? What river, into Bristol Channel? What is the largest river in Ireland?

What three divisions on the island of Great Britain? What is the capital of England? On what river is London situated? What sea-ports of England on the western coast? What sea-ports on the southern coast? Name some cities in central England.

What cities in Scotland on the eastern coast? What city near the western coast? What cities in Ireland on the eastern coast?

Bound France. What is the capital? On what river is Paris situated? What sea-port at the mouth of the Seine? What city in the north? What cities on the Loire? What city on the Garonne? What city on the Rhone? What two sea-ports on the Mediterranean east of the Rhone?

What state north of France? What is the capital of Belgium? What state north of Belgium? What is the capital of Holland?

What state south of France? What is the capital of Spain? What sea-ports on the eastern coast? What city on the Ebro? On the Tagus? On the Guadalquivir?

What state west of Spain? What is the capital of Portugal? On what river is Lisbon situated? What city near the mouth of the Duero?

Bound Germany. What is the capital? What large division in the northern part of the empire? What city at the mouth of the Vistula? Of the Oder? Of the Elbe? What cities on the Rhine? What one on the Weser? On the upper Elbe? What division in south-eastern Germany? What is the capital of Bavaria? What division west of Bavaria? What is the capital of Wurtemberg? What state west of Wurtemberg?

What state south-east of the German Empire? What is the capital of Austria? What large city on the Danube below Vienna? What city on the Moldau River?

What state occupies the peninsula and islands west of the Baltic Sea? What is the capital of Denmark?

What state south of Baden and east of France? What is the capital of Switzerland?

What state south of the Alps? What is the capital of Italy? On what river is Rome situated? What city on the northern part of the Adriatic Sea? What cities near the Po River? What city in southern Italy? What city on the northern coast of Sicily? What city on the Arno? What volcano near Naples? What island south of Corsica belonging to Italy?

What state south-east of Austria? What is the capital of Turkey? On what strait is Constantinople situated? What state south of Turkey? What is the capital of Greece?

DESCRIPTION.

I. POSITION.

1. This section embraces all the states of Europe except Russia, Sweden, and Norway. It is bounded on the south by the *Mediterranean Sea;* on the west, by the *Atlantic Ocean;* and on the north, by the *North Sea* and the *Baltic Sea.*

II. SURFACE.

2. This section is greatly diversified by mountains, valleys, and low plains.

The **Alps** are the principal mountain system of Europe. They extend from the coast of the Mediterranean, in a north-easterly direction, to the low plain of the Danube.

France, Switzerland, Italy, and Austria include portions of the Alps. They consist of many different chains, separated by fertile, but mostly narrow valleys. They are somewhat higher than the Rocky Mountains. *Mont Blanc* is their loftiest peak.

3. The Alps are surrounded on three sides by a broad belt of lower mountains.

The *French Mountains* are in the west, and include the *Cevennes,* the *Jura,* and the *Plateau of Auvergne.*

The *German Mountains* are north of the Alps, and extend from the Rhine to the Oder. The *Bohemian Forest,* the *Sudetes Mountains,* and the *Hartz Mountains* are some of the chains of which they consist.

The *Carpathian Mountains* are north-east of the Alps, and extend from the Oder to the Lower Danube. The *Tatra Mountains* form their loftiest range. The low plain of Hungary lies between the Carpathians and the Alps.

4. The Italian peninsula is traversed by the *Apennine Mountains;* the Turkish peninsula, by the *Dinaric Alps,* the *Pindus Mountains,* the *Schar Dagh* and the *Balkan Mountains.*

5. The Spanish peninsula consists of a table-land, traversed by several mountain ranges trending east

and west. The *Pyrenees*, which are, next to the Alps, the loftiest chain of Europe, separate Spain from France. The *Cantabrian Mountains* extend along the northern coast of Spain. The *Sierra Nevada* trend along the southern coast.

QUESTIONS.—1. What part of Europe is included in this section? Bound it.—2. Describe the Alps. What countries include portions of the Alps? What is said of their height? What is their loftiest peak?

3. Where are the French Mountains? Name some of their chains. Where are the German Mountains? Name some of their chains. Where are the Carpathian Mountains?

4. What mountains traverse Italy? What chains traverse the Turkish peninsula?—5. What is the surface of the Spanish peninsula? Where are the Pyrenees? The Cantabrian Mountains? Where are the Sierra Nevada?

IV. STATES AND CITIES.

6. The British Isles lie west of the North Sea, and, together, are about two and a half times as large as Pennsylvania.

Great Britain is the largest of these islands, and comprises *England*, *Scotland*, and *Wales*.

Ireland is the second in size. The smaller islands are: The *Hebrides*, west of Scotland; the *Orkney Islands*, north of Scotland; and the *Shetland Islands*, north-east of the Orkneys.



Lake Killarney, in Ireland.

7. The surface of Great Britain is greatly diversified. Scotland is covered with mountains—particularly the northern part. The highest range is that of the *Grampian Mountains*. Wales is also mountainous. England is mostly a fertile low plain.

Ireland consists of a low plain, on the borders of which rise isolated mountain groups.

8. The rivers are short, but wide and deep. The most important are the *Thames* and the *Severn* in southern England, and the *Shannon* in Ireland. The climate of the British Isles is very mild and rather moist, owing to the proximity of the sea.

9. The English and the Lowlanders of Scotland are Anglo-Saxons; the Highlanders of Scotland, the Irish, and the Welsh are Celts.

Agriculture is carried on in the most perfect manner. Wheat, barley, and oats are the principal crops. Cotton and woolen goods, cutlery, and machinery are manufactured and exported to the most distant parts of the globe. The mines yield large quantities of coal, iron, copper, tin, and lead.

10. The government is a limited monarchy. The Parliament, which corresponds to our Congress, consists of the House of Lords and the House of Commons.

London, on the Thames, is the capital, and the largest city in the world. It has more inhabitants than the state of Ohio.

11. The principal sea-ports are *Liverpool*, on the western coast; *Plymouth* and *Portsmouth*, on the southern; *Hull* and *Newcastle*, on the eastern. The principal manufacturing cities are *Manchester* and *Leeds*, noted for their cotton goods; *Sheffield*, for its cutlery; and *Stoke* and *Birmingham*, for their iron-ware.

In Scotland are *Edinburgh* and *Glasgow;* in Ireland, *Dublin* and *Belfast*.

12. **France** lies south of the English Channel; and is about five times as large as Ohio. The south-eastern part is mainly mountainous; the north-western, low and level. The Seine, Loire, Gironde, and Rhone are the principal rivers.

13. The climate is warmer, drier, and less changeable than that of England. The soil is fertile, and wheat, oats, beets, and grapes are extensively cultivated. The principal manufactures are cotton, woolen and silk goods, broadcloths, watches, and jewelry.

14. *Paris*, on the Seine, is the capital, and the most magnificent city in the world. *Versailles* contains an immense palace. The principal sea-ports are *Havre*, at the mouth of the Seine; *Bordeaux*, on the Garonne; and *Toulon* and *Marseilles*, on the Gulf of Lyons. *Lyons*, on the Rhone, is noted for its silk manufactories. *Lille*, in the northern part, *Nantes*, on the Loire, and *Rouen*, on the Seine, are important cities.

15. The **German Empire** consists of twenty-six states, which form a confederation. The *Vistula*, *Oder*, *Elbe*, *Weser*, and *Rhine* are the principal rivers.

16. The most important states of the empire are:

(1) The **Kingdom of Prussia**, which borders on the North and Baltic seas, and is the largest and most powerful; (2) The **Kingdom of Saxony**, lying south of eastern Prussia; (3) The **Kingdom of Bavaria**, which lies west of Austria; (4) The **Kingdom of Wurtemberg**, which lies west of Bavaria; and (5) The **Grand Duchy of Baden**, lying between the Rhine and Wurtemberg.

17. The climate is somewhat colder than that of France. The summer is warm and the winter quite cold. Grain, potatoes, flax, and beets are the chief agricultural staples.

The mines yield iron, coal, silver, copper, and zinc. The principal manufactures are cotton, woolen, and silk goods, hardware, and machinery. The commerce is very extensive.

18. *Berlin* is the capital of the kingdom of Prussia and of the empire of Germany. It is a beautiful city, almost as large as New York. *Munich*, the capital of Bavaria, is famous for its collections of paintings and statuary. *Königsberg*, *Dantzic*, and *Stettin* are ports on the Baltic; *Hamburg* and *Bremen* are on rivers flowing into the North Sea.

Important cities in the interior are: *Dresden*, on the Elbe, *Cologne* and *Strasbourg*, on the Rhine, *Metz*, on the Moselle.

19. The **Empire of Austria** (more properly called the Austro-Hungarian Monarchy) lies south-east of Prussia, and includes the eastern part of the Alps. Agriculture, manufacturing and mining are the chief occupations of the people.

Vienna, on the Danube, is the capital of the empire. *Trieste*, on the Adriatic, is the principal sea-port. *Prague*, on the Moldau, and *Buda-Pesth*, on the Danube, are important cities.



Palace of the Tuileries.

20. The **Republic of Switzerland** includes a part of the Alps and Jura Mountains. The Rhine and the Rhone rise in Switzerland. It is a confederation of twenty-two republican states, called *cantons*. Agriculture, dairy-farming and manufacturing are the chief occupations. *Berne* is the federal capital.

21. The **Kingdom of Denmark** includes the peninsula of *Jutland*, and the islands lying between the Baltic Sea and the Cattegat. Agriculture is the principal occupation. *Copenhagen*, on the Island of *Zealand*, is the capital.

22. The **Kingdom of Holland,** or the **Netherlands**. Dairy-farming and commerce are the principal occupations. *The Hague* is the capital. *Amsterdam* is the principal sea-port.

23. The **Kingdom of Belgium,** south of Holland, is the most densely populated country in the world. The manufactures are important. *Brussels* is the capital.

24. The **Kingdom of Spain** occupies the larger portion of the Spanish peninsula. The *Duero, Tagus, Guadiana, Guadalquivir,* and *Ebro* are the principal rivers. Wheat, wool, olives, and grapes are the principal products. The mines yield lead, iron, quicksilver, and copper. The *Balearic Islands*, in the Mediterranean, belong to Spain.

25. *Madrid*, near the Tagus, is the capital. *Barcelona* and *Valencia*, on the Mediterranean, and *Cadiz*, on the Atlantic coast, are the principal sea-ports. *Toledo*, on the Tagus, *Seville*, on the Guadalquivir, and *Granada* are the largest inland cities.

26. The **Kingdom of Portugal** lies west of Spain, and is traversed by the lower courses of the Duero, Tagus, and Guadiana rivers. *Lisbon*, at the mouth of the Tagus, is the capital. *Oporto*, at the mouth of the Duero, is the principal sea-port.

27. The **Kingdom of Italy** lies south of the Alps, and occupies the Italian Peninsula. The climate is hot, and, in the southern portions, nearly tropical. The islands of *Sicily* and *Sardinia* belong to this kingdom. The chief products are wheat, corn, grapes, olives, rice, cotton, and manufactured silk. *Rome*, on the Tiber, is the capital, and the residence of the Pope. *Florence*, on the Arno, was until lately the capital.

28. *Venice, Genoa, Leghorn,* and *Naples* are the prinicpal sea-ports. *Milan* and *Turin*, in the north, are beautiful cities. *Palermo* and *Messina* are the largest cities in Sicily.

29. The **Empire of Turkey** (in Europe) occupies part of the Turkish peninsula. The country is mountainous, but includes many fertile valleys. The Island of Candia belongs to Turkey. *Constantinople*, on the Bosporus, is the capital.

30. The **Kingdom of Roumania and the Principality of Montenegro** were, until 1878, tributary provinces of Turkey. The capitals, respectively, are *Bucharest* and *Cettinje*.

31. The **Kingdom of Servia** was erected in 1882. *Belgrade* is the capital.

32. The **Kingdom of Greece** occupies the southern part of the Turkish peninsula and the *Morea*. The *Cyclades* and *Ionian Islands* belong to Greece. *Athens* is the capital.

QUESTIONS.—6. *Great Britain:* Bound it. What countries does it comprise? Bound Ireland. Where are the Hebrides? The Orkney Islands? The Shetland Islands?—7. What parts of Great Britain are mountainous? Where are the Grampian Mountains?—8. Where is the Thames River? The Severn? The Shannon? What is said of the climate?—9. What branches of the inhabitants are Anglo-Saxons? What branches are Celts? Name the agricultural products. The manufactures. The minerals.

10. What is the government? What and where is the capital?—11. Where is Liverpool? Plymouth? Portsmouth? Hull? Newcastle? Manchester? Leeds? Sheffield? Stoke? Birmingham? Edinburgh? Glasgow? Dublin? Belfast?

12. *France:* Bound it. Describe the surface. The Seine. The Loire. The Gironde. The Rhone.—13. What is said of the climate? Name the agricultural products. The manufactures.—14. What and where is the capital? Where is Versailles? Havre? Bordeaux? Toulon? Marseilles? Lyons? Lille? Nantes? Rouen?

15. *German Empire:* Bound it. Of how many states does it consist? Describe the Vistula. The Oder. The Elbe. The Weser.—16. Name the most important states of the empire.

17. What is said of the climate? Name the agricultural staples. The mining products.

18. What is the capital? Where is Munich? Königsberg? Dantzig? Stettin? Hamburg? Bremen? Dresden? Cologne? Strasbourg? Metz?

19. *Austria:* Bound it. What is the capital? Where is Trieste? Prague? Buda-Pesth?

20. *Switzerland:* Bound it. Describe the surface. How many cantons does it include? What is the federal capital?

21. *Denmark:* What parts does it include? What is the capital?

22. *Holland:* Bound it. Name the chief occupations. The capital.

23. *Belgium:* Bound it. What is said of it? What is the capital?

24. *Spain:* Bound it. Describe the Duero. The Tagus. The Guadiana. The Guadalquivir. The Ebro. Name the principal products. What islands belong to it?—25. What is the capital? Where is Barcelona? Valencia? Cadiz? Toledo? Seville? Granada?

26. *Portugal:* Bound it. What is the capital? Where is Oporto?

27. *Italy:* Bound it. What is said of the climate? Where is Sicily? Sardinia? Name some products. What is the capital? On what river is Rome situated? What is said of Florence?

28. Where is Venice? Genoa? Leghorn? Naples? Milan? Turin? Palermo? Messina?

29. *Turkey:* Bound it. What is said of the surface? The climate? What and where is the capital?

30. What is said of Roumania and Montenegro?

31. What is said of Servia?

32. *Greece:* Bound it. What part of it is the Morea? Where are the Cyclades? The Ionian Islands? What is the capital?


PHYSICAL and POLITICAL
MAP OF
ASIA
by
A. von Steinwehr, A. M.
Scale of Statute Miles.
0 100 200 300 400 500 600 700 800 900 1000
East of Greenwich.
10 30 50 70 90 110 130 150 170
TO NORTH AMERICA
Behring Str.
East C.
C. Chelagskoi
St. Matthew
St. Paul
St. George
Umnaska I.
Aleutian Is.
BEHRING SEA
ARCTIC OCEAN
North C.
Nova Zembla
Sea of Kara
Karian Str.
Waigatz I.
White Sea
North East C.
New Siberia Is.
Liakhov Is.
Lena R.
Yana R.
Indigirka R.
Kolyma R.
Anadyr R.
Anadyr B.
Tundra
Chatanga R.
Taimur R.
Olenek R.
Lena R.
Yana R.
Indigirka R.
Kolyma R.
Stanovoi Mts.
Verkhoyansk Mts.
KAMTSCHATKA
Petropaulovsk
V. Koriask
Behring Str.
Shelutch R.
C. Lopatka
SEA OF OKHOTSK
Ochotsk
Aldan R.
Aldansk
Yakutsk
Aldan R.
Maya R.
Yablonoi Mts.
Nertchinsk
Argun R.
Amoor R.
Blagovestchensk
Lake Dalai Nor
Hingan Mts.
Sea of Japan
Tsushima I.
Gulf of Tokio
Yokohama
Nagasaki
Kiusiu I.
Sikoke I.
Kiusiu I.
Kamakura
Nagasima
Matsumai
Hakodadi
Yesso
Kuril Is.
Shumtchu I.
Urup I.
Tropic of Cancer
Arctic Circle
Turuchansk
Lower Tunguska R.
Middle Tunguska R.
Upper Tunguska R.
Yenisei R.
Yeniseisk
Krasnoiask
Irkutsk
Lake Baikal
Kirenga R.
Vilui R.
Olekminsk
Vitim R.
Witimsk
Olekma R.
Tura R.
Surgut
Samarowsk
Ob R.
Tobolsk
Tiumen
Tobol R.
Irtish R.
Tomsk
Om R.
Omsk
Petropaulovsk
Barnaul
Lake Zaisan
Semipalatinsk
Mt. Bieluche
Altai Mts.
Tannu Ola Mts.
Mathiatchin
Shilka R.
Argun R.
Urga
Jabkan R.
Gobi
Desert of Gobi
Kinchia
Girin
Liao He
Great Wall
Peking
Tientsin
Tsitsihar
Sungari R.
Nonni R.
Mongolia
Manchuria
Russia
Siberia
Ural Mts.
Ural R.
Volga R.
Caspian Depression
Caspian Sea
Aral Sea
Kirghiz Steppe
Sea R.
Hunger Steppe
Balkash L.
Ili R.
Alexander Range
Alatau Mts.
Issik L.
Chamil
Sogock L.
Turfan
Urumtsi
Kizil-koom Desert
Ust-Urt
Barsuk Desert
Desert
Khiva
Bokhara
Samarkand
Khokan
Tashkend
Turkestan
Chinese Turkestan
Tarim R.
Lop L.
Bostang L.
Kuku L.
Hoang Ho
Lanchow
Singan
Kaifung
Honan
Yellow Sea
Yang Chow
Kiang Kiang
Nanking
Shanghai
Soo Chow
Hangchow
Shao Hing
Ningpo
Woochang
Wen Chow
Loo Choo Is.
Nawa
Peling Mts.
Kuen Lun Mts.
Khotan
Altyn Tag Mts.
Kiria
Cashgar
Parkand
Yarkand
Pamir Plateau
Khulm
Hissar
Koondooz
Afghanistan
Cabool
Jellalabad
Khyber Pass
Peshawur
Candahar
Chaman
Helmund R.
Herat
Meshed
Elburz Mts.
Teheran
Persian Desert
Persia
Plat. of Iran
Zagros Mts.
Ispahan
Yezd
Shiraz
Kerman
Hamoon L.
Sukake
Hillah
Bussorah
Euphrates R.
Tigris R.
Kurdistan
Lake of Van
Mosul
Nineveh
Orfa
Erzeroum
Trebizond
Mt. Ararat
Mt. Elbrooz
Mt. Kasbek
Caucasus Mts.
Black Sea
Bosporus
Scutari
Constantinople
Turkey
Danube R.
Crimea
Azof
Don R.
Volga R.
Ural R.
Caspian Sea
Mt. Demawend
Caspian Depression
Sea of Marmora
Smyrna
Rhodes
Cyprus
Mediterranean Sea
Taurus Mts.
Antioch
Aleppo
Orfa
Euphrates R.
Tigris R.
Lake of Van
Mosul
Nineveh
Tabriz

ASIA.

MAP QUESTIONS.—What two grand divisions west of Asia? What isthmus connects Asia with Africa? What ocean north of Asia? What ocean east? What ocean south? What strait between Asia and North America? What six seas on the Pacific coast?

What peninsula east of the Sea of Ochotsk? What peninsula south-west of the Sea of Japan? What islands east of the Sea of Japan? What islands east of the East China Sea? What islands east of the South China Sea?

What island south of the East China Sea? What group of islands south of Formosa? What large island south of the South China Sea? What island east of Borneo? What group of islands east of Celebes? What chain of islands south of Borneo and Celebes?

What sea and what bay on the southern coast of Asia? What gulf extends north-west from the Arabian Sea? What three peninsulas project in a southerly direction from the grand division? What sea west of Arabia?

What is the most northern cape of Asia? The most southern? The most eastern? What cape at the southern extremity of Kamtschatka? Of India? What peninsula between the Mediterranean and Black seas?

What great mountain chain north of India? What chain north of the Himalaya? What chain north of the Karakorum Mountains? What chain north of the Kuenlun Mountains? What mountains north of the Thian Shan?

What desert south-east of the Altai Mountains? What chain bounds the Desert of Gobi on the east? What country between the Himalaya and the Kuenlun Mountains? What chain is the eastern continuation of the Kuenlun Mountains? What chain is the western continuation of the Kuenlun Mountains? What plateau south-west of the Hindoo Koosh? What chain bounds the Plateau of Iran on the east?

What chain traverses Asia Minor? What chain trends along the eastern shore of the Mediterranean Sea? What chain between the Caspian and the Black seas? What chain on the eastern coast of India? On the western coast of India?

Name the three largest rivers emptying into the Arctic Ocean. What river empties into the Gulf of Tartary? What rivers empty into the Petchili Gulf? What river empties into the East China Sea? What large river flows through the eastern part of Farther India?

What two rivers empty into the northern part of the Bay of Bengal? What river empties into the Arabian Sea? What two rivers empty into the Persian Gulf? What river empties into the Caspian Sea? What sea east of the Caspian? What river flows between the Thian Shan and the Kuenlun Mountains?

What division occupies the northern part of Asia? What great empire south of Siberia? What is the capital of the Chinese Empire? On what river is it situated? Name some sea-ports of China. What division south-west of Siberia? What three divisions occupy the peninsula of Farther India? What is the capital of Anam? Of Siam? Of Birmah?

What is the capital of India? What divisions occupy the Plateau of Iran? What is the capital of Persia? What division west of Persia? What division south of Turkey?

DESCRIPTION.

I. POSITION.

1. **Asia** is the eastern part of the Old World, and extends from near the equator to the parallel of 77°. It is the largest of the grand divisions, and has an area of 17,138,000 square miles, being almost twice as large as North America.

2. It is bounded on the north by the *Arctic Ocean*. The eastern coast is washed by the *Pacific Ocean*. There are six great seas on this coast, which are separated from the ocean by chains of islands. The six seas are *Behring Sea*, the *Sea of Ochotsk*, the *Sea of Japan*, the *Yellow Sea*, the *East China Sea*, and the *South China Sea*.

3. The southern coast is washed by the *Indian Ocean*, from which extend the *Bay of Bengal*, the *Arabian Sea*, and the *Red Sea*. On this coast are three large peninsulas: *Farther India*, *India*, and *Arabia*.

4. Asia is bounded on the west by Europe, the *Black Sea*, the *Archipelago*, the *Mediterranean*, Africa,



Mohammedans Kissing the Holy Stone at Mecca.

and the *Red Sea*. The peninsula of *Asia Minor* extends between the Black and the Mediterranean seas. The *Isthmus of Suez* connects Asia with Africa.

II. SURFACE.

5. Asia is covered for the most part by lofty mountains and vast plateaus. The highland region extends from the Mediterranean Sea to the Pacific Ocean. It may be divided into two sections, an eastern and a western, which are connected by the *Hindoo Koosh Mountains*.

6. The eastern section is bounded on the south by the *Himalaya Mountains*, on the north by the *Altai Mountains* on the east by the *Yunling* and the *Great Khingan*, and on the west by the *Pamir Plateau*.

The Himalaya Mountains extend from the Indus River to the Brahmaputra. They form the loftiest range on the globe, and bear numerous peaks from five to six miles in height above the sea-level. *Mount Everest* is the highest peak.

7. This vast region is traversed by three mountain chains trending nearly east and west: the *Karakorum Mountains*, next to the Himalaya the highest of the continent, the *Kuenlun Mountains*, and the *Thian Shan*.



Tiger Hunt in India.

The region between the Kuenlun in the north and the Himalaya in the south, is the lofty *Plateau of Thibet,* which has a mean elevation of about three miles.

8. The western section includes the *Plateau of Iran,* which is surrounded on all sides by mountain barriers: the mountains of Northern Turkey, the *Taurus Mountains* in Asia Minor, and the *Lebanon Mountains,* trending along the eastern shore of the Mediterranean Sea.

Mount Ararat, so famous in sacred history, is the highest peak of the mountains of northern Turkey. Its summit is covered with perpetual snow.

Arabia is a desert plateau diversified by fertile oases. The *Plateau of Deccan* occupies the southern part of India.

9. The great low plains of Asia are the plain of *Siberia* and *Turkestan,* occupying the north-western part of the grand division; the plain of the *Amoor River;* the plain of *China,* through which flow the Hoang Ho and the Yangtse Kiang; the plain of *India,* lying between the Himalaya and the Plateau of Deccan; and the plain of the *Euphrates* and *Tigris* rivers, lying west of the Plateau of Iran.

The plain of India is traversed by the Ganges and Indus rivers. The eastern part is one of the most fertile regions of Asia, and supports a large population; the western part consists of arid deserts, and is very thinly inhabited.

III. RIVERS AND LAKES.

10. The interior of the grand division has no drainage into the ocean. The *Caspian Sea* receives the Ural River, and the *Aral Sea* receives the *Syr* and *Amoo* rivers. The *Tarim River* flows from west to east, through the plateau lying between the Thian Shan and the Kuenlun Mountains.

11. Into the Arctic Ocean empty the *Obe,* rising in the Altai Mountains; the *Yenisei,* which receives the *Upper Tungouska,* the outlet of *Lake Baikal;* and the *Lena.*

Into the Pacific Ocean empty the *Amoor,* formed by the junction of the *Shilka* and *Argoon;* the *Hoang Ho* and *Yangtse Kiang,* both rising in Thibet, and traversing the low plain of China; and the *Cambodia,* flowing through Farther India.

12. Into the Indian Ocean empty the *Ganges,* rising in the Himalaya and flowing through the low plain of India; the *Brahmaputra* and the *Indus,* rising north of the Himalaya, and flowing around the western and eastern extremities of this great mountain chain; the *Euphrates* and *Tigris,* rising in the mountains of northern Turkey, and emptying into the Persian Gulf.

IV. CLIMATE, VEGETATION, AND ANIMALS.

13. Asia extends through all the climatic zones of the northern hemisphere. The three southern peninsulas lie in the torrid zone; the northern parts of Siberia, in the frigid zone; and the intermediate regions, in the temperate zone.

14. The *Tundra,* bordering on the Arctic Ocean, is covered with mosses. Southern Siberia and the Altai Mountains have forests of pines and deciduous trees. The plateaus of central Asia, Iran, and Arabia are arid steppes and deserts, almost destitute of vegetation.

India, Farther India, and southern China have a tropical vegetation of the greatest luxuriance.

Some of the most useful plants which are now cultivated in every continent, grew first in Asia; for instance, wheat, rye, and barley, and the coffee tree. The tea-plant has been cultivated for hundreds of years exclusively in China and Japan.

15. The most noted animals are the *reindeer,* in Siberia; the *camel,* in western and central Asia; the *elephant* and the ferocious *Bengal tiger,* in India and Farther India; the *rhinoceros, monkeys, pheasants, peacocks,* and *parrots;* the *python,* a huge snake; and the *crocodile,* living in the streams of the tropical regions.

QUESTIONS.—1. What part of the Old World is Asia? What is its area? 2. Where is it bounded by the Arctic Ocean? Where by the Pacific Ocean? Where is Behring Sea? The Sea of Ochotsk? The Sea of Japan? The Yellow Sea? The East China Sea? The South China Sea?

3. Where is Asia bounded by the Indian Ocean? Where is the Bay of Bengal? The Arabian Sea? The Red Sea? The peninsula of Arabia? India? Farther India?—4. Where is Asia bounded by the Mediterranean Sea? Where is Asia Minor?

5. Describe the extent of the highland region. Where are the Hindoo Koosh Mountains?—6. Where are the Himalaya Mountains? What is their trend? Where are the Altai Mountains? The Yunling Mountains, and the Great Khingan? The Pamir Plateau?

7. Where are the Karakorum Mountains? The Kuenlun Mountains? The Thian Shan? Where is the Plateau of Thibet?—8. Where is the Plateau of Iran? Where are the Taurus Mountains? The Lebanon Mountains? What is said of the surface of Arabia? Where is the Plateau of Deccan?

9. Where is the plain of Siberia and Turkestan? The plain of the Amoor River? The plain of China? The plain of India? The plain of the Euphrates and Tigris rivers?

10. What part of Asia has no drainage into the ocean? Where is the Caspian Sea? The Aral Sea? Describe the Tarim River.—11. Describe the Obe. The Yenisei. The Lena. The Amoor. What two rivers form the Amoor? Describe the Hoang Ho. The Yangtse Kiang. The Cambodia.

12. Describe the Ganges. The Brahmaputra. The Indus. The Euphrates. The Tigris.—13. What parts of Asia lie in the frigid zone? In the torrid zone? In the temperate zone?

14. What is the Tundra? What parts of Asia are deserts and steppes? What parts have a tropical vegetation?—15. Name some of the animals of Asia.

V. INHABITANTS AND STATES.

16. The population of Asia is about 793,000,000, and comprises more than one half of the entire human family.

The inhabitants belong to three races: the *Caucasian*, the *Mongolian*, and the *Malay*.

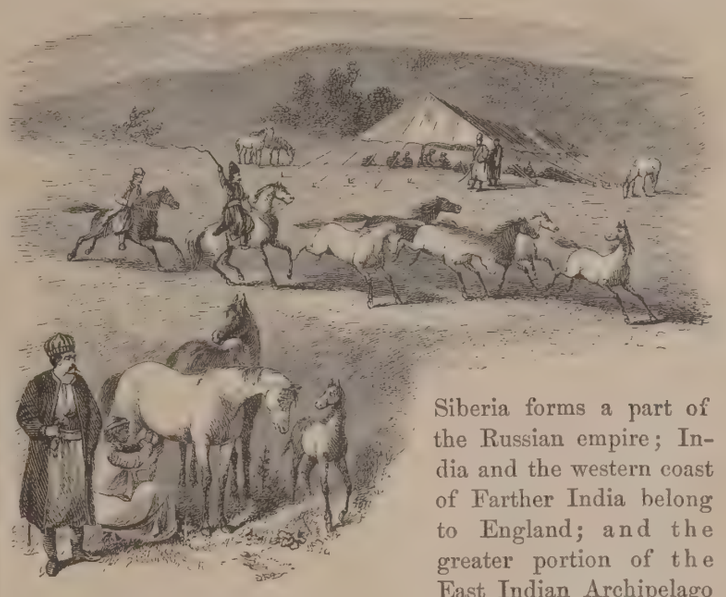
The south-western part of Asia is inhabited by Caucasians, comprising the *Armenians*, the *Persians*. the *Hindoos* in India, the *Arabians*, *Syrians*, and *Jews*.



A Caravan in the Desert.

The northern, central, and eastern parts of Asia are inhabited by Mongolian nations; as, the *Chinese*, *Japanese*, *Turkomans*, and others. The Malay Peninsula and the islands of the eastern Archipelago are inhabited by Malay nations.

17. The English, the Russians, and the Dutch are the only European nations that possess extensive dominions in Asia.



Turkoman Encampment.

Siberia forms a part of the Russian empire; India and the western coast of Farther India belong to England; and the greater portion of the East Indian Archipelago is governed by the Dutch. The governments of the native states are all despotic.

18. **Russia in Asia** comprises Siberia and the country immediately south of the Caucasus Mountains.

Siberia occupies the entire northern part of Asia, and is nearly twice as large as the United States. It is very thinly inhabited, owing partly to the excessively cold climate. The most favored portions of this vast country are some valleys in the eastern Altai Mountains and the low plain of the Amoor.

The wealth of the country consists in its fur-bearing animals, sables, bears, foxes, etc., and the gold, silver, and platinum which are mined in the Altai and Ural mountains. Lead, copper, and iron are also found.

The chief town of eastern Siberia is *Irkoutsk*, on the upper Tungouska; that of western Siberia is *Tobolsk*, on the Irtysh.

The soil of the Russian province south of the Caucasus is fertile, but, owing to the indolence of the people, the agricultural resources of the country have not been developed.

19. **Turkestan** lies south of western Siberia. The greater part is a desert. The inhabitants, called *Turkomans*, are fanatical Mohammedans, and generally lead a nomadic life.

Grain, woolen, and silk goods are the principal products.

The country is divided into the two nominally independent states of *Khiva* and *Bokhara*. These are despotically governed by monarchs called khans, but are strongly under Russian influence. *Khiva* and *Bokhara* are the principal cities of this region.

20. **Persia** occupies the western part of the plateau of Iran. The interior consists chiefly of deserts. The valleys among the mountains which surround the plateau are fertile, and contain the cities and settlements.



Banana. Scene in China. Elephant.

The inhabitants cultivate wheat and various fruits, and raise fine horses and camels. Mohammedanism is the prevailing religion. The monarch is called the *Shah*.

Teheran, south of the Elburz Mountains, is the capital. *Bushire* is a sea-port on the Persian Gulf.

21. **Afghanistan** and **Beloochistan** occupy the eastern part of the plateau of Iran. The inhabitants of both countries are warlike, hospitable, and semi-barbarous. They lead mostly a nomadic life.

The date-palm and corn are cultivated to some extent. The most important cities are *Herat* and *Cabool* in Afghanistan, and *Kelat* in Beloochistan.

22. **Turkey in Asia,** a part of the Turkish empire, embraces Asia Minor, the plain of the Euphrates and Tigris, Syria, including Palestine, and the western part of Arabia. Figs, cotton, and opium are largely exported.

Smyrna, on the Archipelago, and *Trebizond*, on the Black Sea, are flourishing sea-ports. *Scutari* lies opposite Constantinople. *Jerusalem*, the holy city, and ancient capital of Palestine, lies between the Dead Sea and the Mediterranean. *Damascus*, east of the Lebanon Mountains, is an important commercial city.

Mecca and *Medina*, in western Arabia, are cities sacred to the adherents of the Mohammedan religion.

23. **Arabia** lies between the Red Sea, the Arabian Sea, and the Persian Gulf. It is a desert plateau, and has a very hot climate. Coffee, dates, almonds, horses, and camels are the principal products. The horses raised in this country are the finest in the world.

The Arabs are divided into a large number of independent tribes and states. *Nedjed*, which occupies the interior, is the most important. Its capital is *Er Riad*.

24. **East Turkestan** is now a Chinese colony, and lies between the Kuenlun Mountains and the Thian Shan, having the Pamir Plateau upon the west. The Tarim River is wholly within the state. *Cashgar* is the chief city.

25. **India** includes the low plain of the Indus and Ganges, and the plateau of Deccan. The climate is extremely hot, particularly that of the low plains. The vegetation is tropical, and is famous for its wonderful richness.

The inhabitants are chiefly Hindoos,—descendants of the ancient Aryans. Their religion is Brahmanism. Rice, cotton, sugar, opium, and various spices are the principal products. Beautiful silk goods, shawls, and carpets are manufactured.

India is a British possession. *Calcutta*, the capital, and residence of the Governor-general, is situated near the mouth of the Ganges. It is famous for its public buildings. *Madras*, on the eastern coast, and *Bombay*, on the western, are the principal sea-ports. *Delhi* is a large commercial and manufacturing city, situated on a tributary of the Ganges.

The island of *Ceylon* lies south-east of India. The interior is mountainous, and the coasts are low and level. Coffee, the finest cinnamon raised in the world, and cocoa oil are the chief products. The residence of the governor is at *Colombo*. *Trincomali* has a fine harbor.

26. **Farther India** lies between the Bay of Bengal and the South China Sea. It is traversed by several lofty mountain chains. The climate and vegetation resemble those of India.

The central and eastern parts comprise two independent kingdoms: *Anam* and *Siam*. The western part belongs to England. Its principal city is *Rangoon*.

Singapore, situated on a small island in the Strait of Malacca, is an important commercial city. It also belongs to England.

27. The **Chinese Empire** lies south of Siberia, and north of India and Farther India. It includes some of the great interior plateaus of the grand division, as that of Thibet and the Desert of Gobi. The empire is divided into three parts: (1) China proper; (2) Mantchooria; (3) the Colonies, including Thibet, Mongolia, and several smaller territories.



A Hindoo Temple.

China proper borders on the East and South China seas, and is bounded on the west by the Yunling Mountains. It is the most densely inhabited country in Asia, and has a population more than ten times as great as that of the United States.

The Chinese are an industrious and ingenious people, and excel in farming and many branches of manufactures. Rice, wheat, cotton, silk, and tea are the principal products.

Peking is the capital. *Shanghai*, *Canton*, and *Hong Kong* are the principal sea-ports.

Mantchooria lies north of China proper, and east of the Khingan. It is but thinly populated. *Mongolia* lies west of the Khingan. *Thibet* lies between the Kuenlun and Himalaya Mountains. *Corea*, a kingdom which is tributary to China, is a peninsula south-west of Mantchooria.

28. The **Empire of Japan** comprises the islands east of the Sea of Japan. *Jesso, Niphon, Sikoke,* and *Kiusiu* are the largest of these islands. The inhabitants are the most highly civilized natives of Asia. Rice, tea, copper, gold, and silver are the chief products.

Yeddo, or *Tokio,* on Niphon, is the capital. *Yokohama* is the principal sea-port. *Kioto* is the residence of the emperor.

29. The **East Indian Archipelago** comprises the numerous islands south-east of Farther India and the South China Sea. They are mountainous, have a fertile soil, and a hot, moist climate. Coffee, tea, sugar, tobacco, spices, and many other tropical products are extensively cultivated. The inhabitants are chiefly Malays.

The *Sunda Islands,* of which *Sumatra* and *Java* are the largest, belong to Holland. *Batavia,* on Java, is the capital.

The larger part of *Borneo* and *Celebes,* lying north of the Sunda Islands, and the *Molucca,* or *Spice Islands,* the most eastern group of the Archipelago, also belong to Holland.

The *Philippine Islands* belong to Spain. *Manila,* on the island of *Luzon,* is the principal city.

QUESTIONS.—16. What is the population of Asia? To what three races do the inhabitants belong?—What part of Asia is inhabited by each race?

17. What part of Asia forms part of the Russian empire? What parts belong to England? To the Dutch? What is said of the native states?

18. *Russia in Asia:* What two countries does it comprise? Bound Siberia. What is said of its extent? In what does the wealth of the country consist? What is the chief town of the eastern part? Of the western part? What is said of the Russian province south of the Caucasus?

19. *Turkestan:* Bound it. What is said of the inhabitants? What are the principal products? What are the principal towns?

20. *Persia:* Bound it. Of what plateau is it a part? What is said of the interior? Of the valleys? What are the products? What is the capital? Where is Bushire?

21. *Afghanistan. Beloochistan:* Where are they? What is said of the inhabitants? Where is Herat? Cabool? Kelat?

22. *Turkey in Asia:* What countries does it comprise? What products are exported? Where is Smyrna? Trebizond? Scutari? Jerusalem? Damascus? Mecca? Medina?

23. *Arabia:* What is said of the surface? The climate? Name the principal products. Where is Nedjed? What is its capital?

24. *East Turkestan:* Bound it. Name its principal river. What is the chief city?

25. *India:* Bound it. What two natural regions does it comprise? What are the inhabitants? The products? To what European state does India belong? What and where is the capital? Where is Madras? Bombay? Delhi? Where is Ceylon? Where does the governor reside?

26. *Farther India:* Bound it. What is said of the surface? Name the two independent states. What part belongs to England? Where is Rangoon? Singapore?

27. *The Chinese Empire:* Bound it. What regions does it include? Into what three parts is the empire divided? What is said of China proper? Of the Chinese? Name the products. What is the capital? Where is Shanghai? Canton? Hong Kong? Where is Mantchooria? Mongolia? Thibet? Corea?

28. *The Empire of Japan:* What islands does it comprise? Name the four largest islands. What is said of the inhabitants? Name the products. What and where is the capital? Yokohama? Kioto?

29. *The East Indian Archipelago:* What islands does it comprise? What is said of its soil and climate? Name the products. Where are the Sunda Islands? What is the capital? Where is Borneo? Celebes? The Spice Islands? Where are the Philippine Islands? What islands belong to Holland? To Spain? Where is Manila?

MAP DRAWING.

MAP OF ASIA.

1. Draw six horizontal and five vertical lines, as in the annexed figure. You thus obtain a rectangle, which is divided into twenty squares.

2. Point A is the corner of a square. The East Cape and Behring Strait are near it. Point B is one third of the side of a square to the left of the right hand vertical line.

3. Points C and E are the corners of squares. Point D is the center of the side of a square. Point F is one third of the side of a square above the fifth horizontal line.

4. Points G, H, and I are found by trisecting the sides of the squares in which they lie. Point K is the corner of a square.

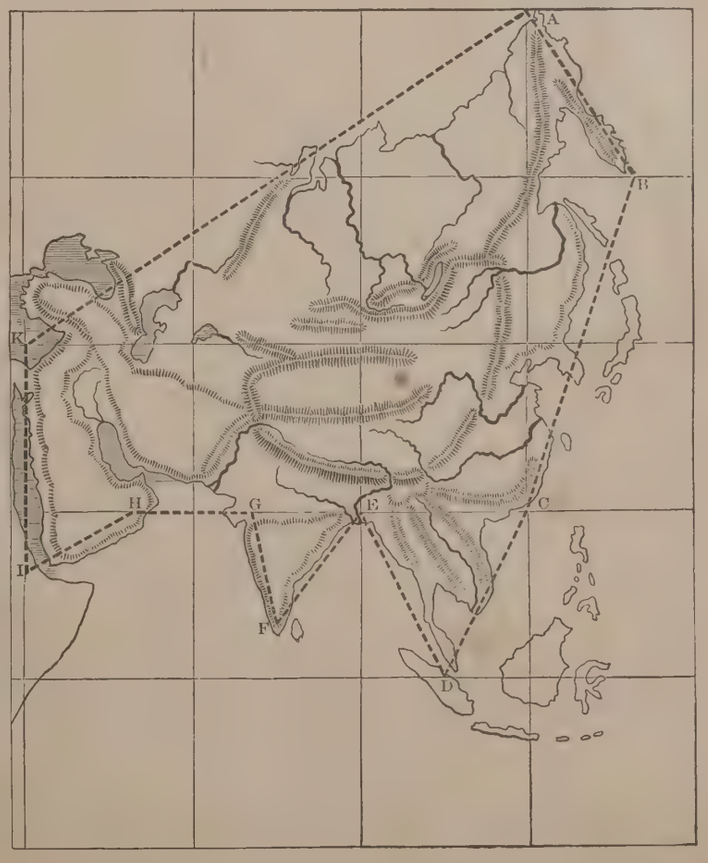
5. Point B marks the southern extremity of Kamtschatka. Point C is on the southern coast of China. Point D is the center of Sumatra. Cape Comorin, the southern termination of India, is near point F. The Isthmus of Suez is south of point K.

6. Connect these points by straight lines. You thus construct the fundamental figure of Asia. Draw the outline of the grand division. Be careful to delineate correctly the six seas on the Pacific coast and the indentations from the Indian Ocean.

7. Draw the principal rivers and mountain systems. The southern slope of the Himalaya and the northern of the Kuenlun Mountains should be shaded most darkly. The great highland region of central Asia should be represented in a clear and graphic manner.

8. Draw the islands off the eastern shores of the main-land and of the East Indian Archipelago. Note that Borneo includes the intersection of a vertical and horizontal line.

9. Locate the principal cities, and letter the map. The side of a square is about 1590 miles long. Hence, the distance from Behring Strait to Sumatra is about 4×1590, or 6360 miles.




AFRICA
by
A.v. Steinwehr, A.M.
REFERENCES:
European Possessions;
(Br.) British; (Fr.) French;
(Sp.) Spanish; (P.) Portuguese.
African States;
The names of African Tribes in Italics, as: Tuaregs.
The names of States in Roman capitals, as: ALGIERS, etc.
Scale of Statute Miles.
0 100 200 300 400 600 800
Pennsylvania. 46,000 sq. mls.
30 West of 20 Greenwich. 10 0 10 20 30 40 East of 50 Greenwich. 60
67 77 87 97 107 117 East of 127 Washington. 137
B. of Biscay
FRANCE
ITALY
TURKEY
Black Sea
Corsica
Sardinia
Sicily
MEDITERRANEAN SEA
ASIA MINOR
GREECE
Crete
Cyprus
SYRIA
Azores Is. (P.)
Fayal I.
Terceira I.
S. Miguel I.
Lisbon
PORTUGAL
SPAIN
Gibraltar
Str. of Gibraltar
Tangier
Ceuta
Algiers
Oran
Constantine
Tunis
C. Bon
Susa
Shelf
Mts.
Madeira I. (P.)
Funchal
Canary Is. (Sp.)
Lanzerote
Palma
Ferro
Tenerife
C. Nun
C. Bojador
Morocco
Mogador
Agadir
Tafilelt
Fez
ALGERIA
Wargla
G. of Cabes
Tripoli
Benghazi
Grennah
G. of Sidra
Plat. of Barca
Plat. of Ham.
Ghadames
Alexandria
Cairo
Suez
Isthmus of Suez
Mt. Sinai
Siwah Oasis
Fayoom
MOROCCO
TRIPOLI
EGYPT
Wady Draa
Insalah
Libyan DESERT
Ghat
Murzuk
FEZZAN
Gatrone
Siut
Girgeh
Keneh
Esneh
Assouan
Medina
Mecca
Derr
Tropic of Cancer.
Arguin
Wadan
Shinghit
C. Blanco
SAHARA
Tuaregs
Moors
Tibesti
Tintellust
Agades
AIR
Sclufeh
Kisbi
Bilma
El Arawan
Walata
Timbuktu
Tuaregs
Arabia
Red Sea
Suakin
Berber
NUBIA
Abbera R.
Massowah
Khartum
Blue Nile
Str. of Bab-el-Mandeb
Aden
G. of Aden
Socotra I.
Gondar
Zuna L.
Magdala
ABYSSINIA
SHOA
Ankober
Berbers
C. Guardafui
Somali
Podor
St. Louis
Senegal R.
Bakel (Fr.)
Jolofs
C. Verde
Cayor
Bathurst (Br.)
Gambia R.
Bissago Is. (P.)
Grande R.
Senegal
MASINA
Delta L.
Niger R.
Sego
BAMBARRA
GANDA
Sokoto
Sinder
Kuka
BORNU
KANEM
L. Tsad
BAGIRMI
Bahr R.
WADAY
Abeshr
Kobbe
Fasher
El Obeid
Kordofan
DARFUR
Salamat R.
Kong Mountains
SOKOTO
Kano
Yakoba
Bight of Benin
Freetown (Br.)
I. Sherbro (Br.)
Liberia
Monrovia
Grain Coast
UPPER GUINEA
ASHANTEE
DAHOMEY
Cumassie
Agoney
Lagos (Br.)
Benue R.
ADAMAUA
Abai R.
Dar Fertit
Bahr el Ghazal
White Nile
Sobat R.
Gallas
Somali
Harper
C. Palmas
Ivory Coast (Br.)
Gold Coast (Br.)
C. Three Points
Accra (Br.)
St. Paul R.
Gulf of Guinea
Old Calabar
Cameroon Mts.
Niam-Niam
Welle R.
Juba R.
Haines R.
Magadoxo
I. Fernando Po (Sp.)
Princes I. (P.)
I. St. Thomas (P.)
C. Lopez
Crystal Mts.
Ogowai R.
Gaboon R.
Equator
Congo R.
Mt. Kenia
Juba
Victoria L.
Albert L.
Mt. Mfumbira
Mt. Kilimanjaro
Mellinda
Mombas
Pemba I.
Zanzibar I. & Tn.
Seychelle Is. (Br.)
Amirante Is. (Br.)
I. Annobon (Sp.)
Mayumba
Loango
Kabinda
Congo
CONGO
LOANGO
Sankorra L.
Ujiji
Tsaboro
I. Monfia
Ascension (Br.)
St. Paul de Loanda
ANGOLA
Cassange
Kabebe
Cazembe
L. Moero
Tiki L.
L. Kassali
Lufiji R.
Zambezi
Rovuma R.
C. Delgado
Comoro Is.
C. Amber
Mayotta (Fr.)
Nyassa L.
Shirwa L.
Lupata Mts.
Mozambique
Pisanga
Mozambique Chan.
St. Phillip de Benguela
BENGUELA
L. Dilolo
Lokinga Mts.
Mossamedes
MOSSAMEDES
C. Negro
Nourse R.
Cunene R.
Makololo
Tete
Senna
Quilimane
Boina
I. S. Marie
Tamatave
Tananarivo
C. Frio
Ovampos
Damaras
Linyanti
Matabele
Matoppo Mts.
Sofala
Mananzari
L. Ngami
Kalahari Desert
Barmen
Walfish B.
Tropic of Capricorn.
Wesley Vale
Limpopo R.
Inhambane
C. Corrientes
Manambatu
C. S. Marie
Bechuanas
TRANSVAAL
Rustenburg
Pretoria
Delagoa B.
Namaquas
Bethany
Potchefstrom
Orange R.
Bushmen
Bloemfontein
ORANGE RIV. REP.
NATAL
Port Natal
D'Urban
CAPE COLONY
Nieuwaveld Mts.
Beaufort
Gr. Karroo
Graham's Town
Clanwilliam
Table B.
Cape Town
Caledon
Georgetown
Algoa B.
Port Elizabeth
C. of Good Hope
False C.
Agulhas
Madagascar
Mozambique Chan.
INDIAN OCEAN
ATLANTIC OCEAN
St. Helena
CAPE VERDE IS.
Portuguese.
S. Antonio
S. Vincent
S. Nicolas
Sal
Bonavista I.
Mayo
Brava I.
Santiago I.
C. Verde
Bathurst
Bissago I.
Senegal R.
15 N.
20 W.
AFRICA
MASCARENE IS.
Rodriguez I. (Br.)
Reade I.
Port Louis
Mauritius I. (Br.)
St. Denis
Reunion I. (Fr.)
MEDITERRANEAN SEA
Alexandria
Rosetta
Damietta
Port Said
El Arish
Gazzah
Jerusalem
Dead Sea
Jaffa
Damanhur
Natron Lks.
Natron Val.
Ismatlia
Tinsdah L.
Wady el Arabah
CAIRO
Suez
Desert
Et Tyh
Jabel et Tyh
Akaba
Pyramids of Gizeh
Ruins of Memphis
Atfeeh
Beni Suef
Medinet el Fyoom
Gulf of Suez
Gulf of Akaba
Mt. Sinai
Mt. Catharine
Abou Girgeh
Minieh
Beni Hassan
J. Aghrib
J. Kiswieh
Siut
Akmin
J. Munfiyeh
Girgeh
Keneh
Tiran I.
C. Mohammed
RED SEA
Libyan Desert
Karnak
Luxor
Esneh
Edfu
Great Oasis
EGYPT
First Cataract
Assouan
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AFRICA.

MAP QUESTIONS.—What ocean bounds Africa on the east? What ocean on the west? What sea on the north? What isthmus joins Africa to Asia? What sea separates it from Arabia? What strait leads into the Red Sea? What gulf east of the Strait of Bab-el-Mandeb? What cape at the eastern extremity of Africa? What large island east of Africa? What channel between Madagascar and the main-land?

What cape at the southern extremity? What cape west of Cape Agulhas? What gulf indents the western shore? What two bights extend from the Gulf of Guinea? What two capes between the Bight of Biafra and the Cape of Good Hope? What cape is the western extremity of the grand division? What capes between Cape Verde and the Bight of Benin?

What strait leads into the Mediterranean Sea? What two gulfs extend from the Mediterranean Sea?

What mountainous country lies near the Strait of Bab-el-Mandeb? What two peaks near the eastern coast, south of the equator? What chains trend along the eastern shore? What chains trend along the coast of the Gulf of Guinea?

What mountains in the north-western part of the grand division? What plateaus in the northern part? What great desert? What desert in the southern part?

What river flows through the north-eastern part of the grand division? What two large lakes does the Nile drain? What is the course of the Nile? Into what sea does it empty? What rivers empty into the Nile from the east? What one from the west? What lake south of Albert Lake? What large river empties into the Mozambique Channel? What river in the south empties into the Atlantic? What large river empties into the Atlantic south of the Gulf of Guinea?

What river empties into the Gulf of Guinea? Where does the Niger rise? Describe its course. What two rivers empty into the Atlantic near Cape Verde?

What country occupies the valley of the Nile? What is its capital? In what division is it? What division south of Egypt? What country south-east of Nubia? What country west of Egypt? What is the capital of Tripoli? What three countries include the Atlas Mountains?

What great region lies south of the Sahara? What is the name of the country north of the Gulf of Guinea? What is the name of the country south-east of the Gulf of Guinea?

What division occupies the most southern part of Africa? What is the capital of Cape Colony? What republic north-east of Cape Colony? What republic north of the Orange River Republic?

What is the coast called north of the Zambeze River? What is the name of the coast north of Mozambique?

DESCRIPTION.

I. POSITION.

1. **Africa** is the south-western part of the Old World. The *Mediterranean Sea* washes the northern shore, and separates it from Europe. The western shore is washed by the Atlantic Ocean; the eastern, by the Indian Ocean.

2. Africa has but few shore indentations. The *Gulf of Sidra* and the *Gulf of Cabes* are on the Mediterranean shore. The *Gulf of Guinea* is on the Atlantic shore. The *Red Sea* separates Africa from Arabia. The *Isthmus of Suez* is at the north-eastern corner of the grand division, and joins Africa and Asia.

3. *Madagascar* is the only large island belonging to Africa. Its area is more than four times that of Pennsylvania. The *Mascarene Islands* are east of Madagascar.

The *Cape Verde Islands*, the *Canaries*, and the *Island of Madeira* are north-west of Africa, in the Atlantic Ocean.

II. SURFACE.

4. **Africa** is a vast table-land, inclosed upon nearly all sides by mountain ranges. This table-land is much higher in the southern than in the northern part of the grand division.

5. Numerous mountain ranges extend south from the plateau of Abyssinia. Near the equator are the lofty peaks *Kenia* and *Kilimanjaro*. South of these are the *Lupata Mountains*.

6. The *Nieuweveld Mountains* bound the African table-land on the south. The *Kong Mountains* extend from east to west in Upper Guinea. The *Atlas Mountains* occupy the north-western part of the grand division, and trend from south-west to north-east.

7. The interior of Africa, which is inclosed between the mountain chains just described, is divided into three sections: the Sahara, the Soudan, and the plateau of Southern Africa.

8. The *Sahara* extends across the northern part, and occupies about one fifth of the grand division. It consists partly of sandy wastes, and partly of rocky table-lands, traversed by barren mountain chains. The fertile spots in this vast desert are called *oases*.



View of Cairo.

9. The *Soudan* lies south of the Sahara, and has a rich soil, copious summer rains, and an excessively hot climate. The table-land of *Southern Africa* extends from the Soudan to the Nieuweveld Mountains.

III. RIVERS AND LAKES.

10. The *Nile* is the largest of the African rivers. It is the outlet of the two large lakes, *Albert* and *Victoria*. It has a northerly course, and empties into the Mediterranean Sea.

11. The *Niger* rises on the northern slope of the Kong Mountains, flows first north-east, then south-east, and empties into the

Gulf of Guinea. The *Senegal* and the *Gambia* rise in the Kong Mountains, flow to the west, and empty into the Atlantic.

12. The *Congo River* is next in size to the Nile; its upper source is called *Lualaba River*. The *Coanza, Nourse* and *Orange* rivers traverse south-western Africa.

13. The *Zambeze* rises on the central table-land, flows eastward, and empties into the Mozambique Channel. Near the middle of its course it forms the *Victoria Falls*, which rival the Falls of Niagara in grandeur.

Lake Tsad, in Soudan, has no outlet. Lakes *Tanganyika, Bangweolo*, and *Kamalondo* are drained by affluents of the Congo.



Skirmish between the French and Kabyles, in Algeria.

IV. CLIMATE, VEGETATION, AND ANIMALS.

14. Africa has the warmest climate of any grand division. Four fifths of its area lie within the torrid zone. The northern and southern extremities are in the temperate zones.

The Soudan and the greater part of Southern Africa have a moist climate, and are covered with magnificent tropical forests or luxuriant prairies.

15. The Sahara is almost rainless, and hence is a dreary desert. The date-palm is cultivated in the oases wherever irrigation is possible. It yields the principal food of the inhabitants.

16. The most noted wild animals of this continent are the *lion*, the *leopard*, the *hyena*, the striped *zebra*, and the tall *giraffe*. The *elephant* and the *two-horned rhinoceros* abound in the interior. The huge *hippopotamus*, or river horse, is found in nearly all tropical streams and lakes. The *ostrich*, the largest kind of bird, inhabits the deserts.

V. INHABITANTS.

17. The population of Africa is estimated at 206,000,000. They belong to two races, the Caucasian and the Ethiopian.

The native Caucasians include the *Abyssinians*, the *Fellahs* in Egypt, the *Arabs, Tuaregs*, and *Moors* of the Sahara, and the *Berbers* in the Mediterranean countries.

18. The *Ethiopians* include the *Negroes* in the Soudan, the eastern Sahara, and the central parts of the grand division; and the *Hottentots* and *Caffirs* in Southern Africa.

QUESTIONS.—1. What part of the Old World is Africa? What coast is washed by the Mediterranean Sea? By the Atlantic Ocean? By the Indian Ocean?—2. Where is the Gulf of Sidra? The Gulf of Cabes? The Gulf of Guinea? The Red Sea? The Isthmus of Suez?

3. Where is Madagascar? How large is it? Where are the Mascarene Islands? Where are the Cape Verde Islands? The Canaries? Where is the Island of Madeira?

4. What is said of the surface?—5. What lofty peaks on the east coast, south of the equator? Where are the Lupata Mountains?—6. The Nieuweveld Mountains? The Kong Mountains? The Atlas Mountains?—7. Into what three sections is the interior of Africa divided?

8. Where is the Sahara? How large is it? What is said of it? What are oases?—9. Where is the Soudan? What is said of its soil and climate? What is said of Southern Africa?

10. Describe the Nile. Of what two lakes is it the outlet?—11. Describe the Niger. The Senegal and the Gambia.—12. Describe the Congo. The Coanza, Nourse, and Orange rivers.—13. Describe the Zambeze. What is said of Lake Tsad? How are lakes Tanganyika, Bangweolo, and Kamalondo drained?

14. What is said of the climate? What part of Africa lies within the torrid zone? Within the temperate zones? What is said of the vegetation of the Soudan?—15. What is said of the Sahara? What kind of palm is cultivated in the oases?—16. Name some of the wild animals of Africa.

17. What is the number of the inhabitants? To what two races do they belong? Name some Caucasian nations of Africa.—18. What part of Africa is inhabited by Ethiopians? Name some Ethiopian nations.

VI. STATES AND CITIES.

19. The **Empire of Morocco** occupies the north-western part of the grand division. It borders on the Atlantic Ocean and the Mediterranean Sea, and is traversed by the Atlas Mountains.

The inhabitants cultivate the date-palm, wheat, and tropical fruits, and manufacture fine moroco leather. *Fez* is the capital. *Morocco* and *Mogador* are important cities.

20. **Algeria** lies east of Morocco, and belongs to France. The valleys among the Atlas Mountains are fertile. The southern part extends into the Sahara. The cities are inhabited by Moors. The *Kabyles*, a tribe of Berbers, live in the country. *Algiers* is the capital.

21. **Tunis** lies east of Algeria. The inhabitants are industrious, and cultivate olives, tropical fruits, and cereals. Gold, silk, and linen goods are exported. *Tunis* is the capital.

22. **Tripoli** lies east of Tunis, and belongs to the Turkish Empire. It includes the oasis of *Fezzan*. *Tripoli* is the capital.

23. The **Dominion of the Khedive** embraces *Egypt, Nubia, Kordofan*, and *Darfur;* it is nominally subject to Turkey, but is really an independent despotism. The bottom-lands of the Nile are very fertile. Grain and cotton are the principal products. A ship canal has been constructed across the Isthmus of Suez.

Cairo, the capital, lies in the delta of the Nile, and is the largest city of Africa. *Alexandria* is the largest sea-port.

24. **Abyssinia** lies south-east of Nubia. It is a mountainous plateau of great height. The Abyssinians are Christians.

25. The **Sahara** is very sparsely inhabited, and contains no states. The various tribes of Moors, Tuaregs, and Tebus, who

inhabit the oases or roam over the country without fixed habitations, are governed by chiefs.

26. The **Soudan** includes a large number of states, inhabited by Mohammedan Negroes. They raise cereals and sorghum, manufacture cotton and woolen goods, and carry on some commerce with the sea-ports on the Mediterranean.



The Sphynx and the Pyramids, in Egypt.

27. **Cape Colony**, a British possession, lies south of the Orange River. The climate is mild. Wheat, wool, and wine are the chief products. *Cape Town* is the capital.

Transvaal and *Orange River* republics were founded by Dutch colonists. The former has been annexed to the British Empire.

28. *Congo*, *Angola*, and *Benguela*, on the coast of Lower Guinea, and the coast of Mozambique are claimed by the Portuguese. The inhabitants are Negroes.

29. The island of **Madagascar** is inhabited by the *Hova*, a Malay nation which has advanced considerably in civilization. It forms a kingdom. *Tananarivo* is the capital.

Reunion belongs to France; *Mauritius* to England; the *Cape Verde Is.* and *Madeira* to Portugal; and the *Canaries* to Spain.

QUESTIONS.—19. *Morocco:* Bound it. What mountains traverse it? What products are raised? What is the capital? Locate other cities.

20. *Algeria:* Bound it. To whom does it belong? What mountains traverse it? What is said of the southern part? What is the capital?

21. *Tunis:* Bound it. What is said of the inhabitants? What is the capital?

22. *Tripoli:* Bound it. What oasis does it include? What is the capital?

23. *Dominion of the Khedive:* What does it embrace? How governed? What river flows through it? What part is fertile? What are the principal products? What and where is the capital? Where is Alexandria?

24. *Abyssinia:* Where is it? What is said of the surface?—25. Name some tribes inhabiting the Sahara. What is said of them?—26. What is said of the Soudan? Of its inhabitants? What products do they raise?

27. *Cape Colony:* Bound it. To whom does it belong? What is said of the climate? The products? What is the capital? Where is the Orange River Republic? The Transvaal Republic?—28. What countries are claimed by Portugal?

29. *Madagascar:* By whom is it inhabited? To whom does Mauritius belong? Reunion? Cape Verde Islands? Madeira? The Canaries?

MAP DRAWING.

MAP OF AFRICA.

1. Draw five horizontal and five vertical lines, as in the annexed figure. You thus obtain a square which is divided into sixteen small squares.

2. Point A is one third above the top line of the square. Draw a horizontal line through A equal to two thirds of the side of a square: point B is at the end of this line. Draw a vertical line through B: point C is at the intersection of this line with the upper horizontal line.

3. Point D is one third of the side of a square to the left of a vertical line, and point E one third to the right of it. Point G is one third below the second horizontal line. Draw a line through D E: point F is at its intersection, with the horizontal line drawn through point G.

4. Point H is the center of the side of a square. Point I is the left hand lower corner of the same square. Point K is the center of the side of a square. Draw a horizontal line one third of the side of a square above point K: point L is at the intersection of this line with the line drawn through I K.

5. Point M is the center of that part of the horizontal line drawn through L, which is in the square to the left of L. Point N is the corner of a square, and point O the center of the side of a square.

6. The Strait of Gibraltar is a little to the left of point A; Cape Bon is near point B; Cape Guardafui north of point G; the Cape of Good Hope near point I; and Cape Verde near point N. Point L is east of the delta of the Niger River.

7. Connect the points described by straight lines; draw the outline, the rivers, and mountains; locate the chief towns, and letter the map.

8. The length of the side of a square is nearly equal to 1122 miles. Hence, the distance from Cape Bon to the Cape of Good Hope is about $4\frac{1}{3} \times$ 1122, or 4862 miles. The distance from Cape Guardafui to Cape Verde is about 4×1122, or 4488 miles.





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AUSTRALIA.

Int. 13.

MAP QUESTIONS.—In what hemisphere is the continent of Australia situated? What grand division lies nearest to it? What cape is the northern extremity? What cape the eastern? What cape the north-western? What cape the south-western?

What gulf on the northern side? On the southern? What bight west of Spencer Gulf? What ocean washes Australia on the west and south? What ocean on the north and east? What large island north of Australia? What island south of it? What islands on the south-east? What island half way between New Guinea and New Zealand? What island chains parallel to New Guinea and New Caledonia?

What long chain of small islands trending east and west lie north of New Guinea? What two chains trending north-west and south-east lie east of the Caroline Islands? What chain of islands south-east of the Ralick Islands? What group of islands east of the New Hebrides? Which is the largest of the Sandwich Islands?

In what part of Australia are the highest mountains? Name the principal chains on the eastern coast.

What river in Australia empties into Encounter Bay? What are its two largest tributaries? Name three large lakes north of Spencer Gulf.

What division occupies the north-eastern part of the continent? The south-eastern part? What division lies between them? What division occupies the western part? What division the middle part?

What is the capital of New South Wales? Of Victoria? Of Queensland? Of South Australia? Of West Australia? Of Tasmania? Of New Zealand?

DESCRIPTION.

I. POSITION.

1. This grand division lies south-east of Asia, and consists of the Australian continent and a large number of islands.

2. The *continent*, nearly 3,000,000 of square miles in area, lies in the southern hemisphere. It resembles Africa and South America in the simplicity of its outline, and its lack of important gulfs and peninsulas.

3. The *islands* lie north and east of the continent, and form two extensive belts. The first forms a curve from New Guinea in the north-west to New Zealand in the south-east, and includes the larger islands of the division. The second trends parallel to the first, and consists of many different chains of small islands.

4. The first belt may be called the *Australian Islands;* the second, the *Polynesian Islands.* Both together have an area of 425,000 square miles. The grand division of Australia is, therefore, nearly as large as the United States, including Alaska.

II. THE CONTINENT.

5. The surface of the Australian continent resembles that of Africa. The highest mountain chains lie along the eastern coast; a series of lower chains are on the western coast; and the interior is a moderately elevated plateau.

The eastern mountains are about as high as the Apalachian Mountains. The *Australian Alps,* in Victoria, the *Blue Mountains,* and the *Liverpool* and *New England* ranges farther north, are the principal ranges. *Tasmania* is very mountainous.

6. Australia has but one river system of importance, that of the *Murray,* which, with its tributaries, the *Lachlan* and the *Darling,* drains the eastern mountains. A lake region lies north of Spencer Gulf, including *Lake Eyre, Lake Gairdner,* and *Lake Torrens,* which have no outlets.

7. Australia lies on both sides of the Tropic of Capricorn. The northern part is in the torrid zone; the southern part in the warm temperate zone. The climate, therefore, is warm.

In the east, it rains abundantly in spring and fall. The summer is dry and very hot, and the winter clear and mild. This part of the continent is fertile, and the vegetation luxuriant. The forests abound in shrubs and evergreen trees, and alternate with open treeless prairies or shrubby plains.

The interior of the continent is excessively hot and dry. It is probably an extensive steppe. Large parts of it are not yet known.

8. Australia has no large or fierce animals. The *kangaroo,* an animal with short fore legs, but long and powerful hind legs, is the largest. When standing upon its hind legs, it is about the height of a man. The *duck-bill,* or *ornithorhynchus,* has the body of an otter and the bill of a duck, and is one of the most peculiar animals in the world. The *emu* and *cassowary* are birds that resemble the ostrich.

9. The native inhabitants are dark-colored, and belong to the Malay race. Their number is estimated at only 50,000. The whole continent belongs to Great Britain, and the colonies which have been established contain about 2,000,000 white inhabitants, chiefly English.

The chief products are gold, wool, copper, tin, and wheat. Nearly as much gold is mined in Australia as in our country.

10. The following are the colonies:

(1) **Queensland** occupies the north-eastern part of the continent. *Brisbane* is the capital.

(2) **New South Wales** lies south of Queensland. *Sydney,* the capital, is a beautiful city.

(3) **Victoria,** south of New South Wales, has rich gold and copper mines, and is a very fertile country. *Melbourne* is the capital.

(4) **South Australia** includes all the central part of the continent. *Adelaide,* the capital, exports much wool, copper, and wheat.

(5) **West Australia** produces excellent wine and wheat, and abounds in minerals, such as copper, zinc, lead, etc. *Perth* is the capital.

(6) **Tasmania** produces wool, wheat, and tin. *Hobart* is the capital.



Sydney, New South Wales.

QUESTIONS.—1. Where is the grand division of Australia situated? Of what does it consist?—2. What is the area of the continent? What is said of its outline?—3. Describe the situation of the islands. What two belts do they form?—4. What is the name of the belt nearest the continent? Of the belt farthest from it? What is their area?

5. Describe the surface of the continent. Where are the Australian Alps? The Blue Mountains? Where is the Liverpool Range? The New England Range?—6. Describe the principal river system. Where is the lake region? What lakes does it contain?

7. In what two zones does Australia lie? What is said of the climate of the eastern part? What of the vegetation? What of the climate of the interior?—8. Name the principal animals.

9. To what race do the natives belong? To whom does Australia belong? What is the number of the white inhabitants? What are the chief products?

10. Where is Queensland? What is its capital? Where is New South Wales? What is its capital? Where is Victoria? What is its capital? Where is South Australia? What is its capital? Where is West Australia? What is its capital? Where is Tasmania? What is its capital?

III. THE AUSTRALIAN ISLANDS.

11. This island belt lies south of the equator, and, with the exception of New Zealand, within the torrid zone.

New Guinea lies near the equator. It is separated from the continent by Torres Strait. On the west, it approaches to the East Indian Archipelago, which belongs to Asia. The interior of this large island has never been explored. It is inhabited by Malay tribes: the *Arafuras* in the interior, and the *Papuans* on the sea-shore. Parts of the island are claimed by Holland.

12. *New Caledonia* lies south-east of New Guinea, and is inhabited by Papuans. The French have taken possession of it, and founded some small settlements.

New Britain, *New Ireland*, and the *Salomon Islands*, lie near New Guinea; the *New Hebrides* lie near New Caledonia.

13. *New Zealand* lies south-east of the continent of Australia, and consists of the *North* and *South* islands, which are separated by Cook Strait.

Mountain chains, which rise into the regions of perpetual snow, and trend from north-east to south-west, traverse the islands. The climate is mild and without extremes. The natives are the *Maoris*, a Malay tribe, of brown color, tall and athletic figure, and possessing much intelligence.

New Zealand is a British possession. The English inhabitants carry on agriculture, commerce, and mining. The gold mines are very rich. Kauri gum is largely exported. *Wellington*, the capital, is situated on the North Island.

The *Feejee Islands*, north of New Zealand, are mountainous, have a tropical climate, and a rich vegetation. The Malay inhabitants have mostly been converted to Christianity.

IV. THE POLYNESIAN ISLANDS.

14. This belt comprises a large number of chains of small islands, and has a general trend from north-west to south-east. It lies entirely within the torrid zone.

Almost all the islands of this belt are *coral* formations. Coral is the deposit of many kinds of small sea animals, that live together in vast numbers. These formations are either *reefs* or *atolls*. Reefs are bands of coral rock, which surround an island or fringe the coast of a continent; atolls are similar bands, which surround a shallow lake, or lagoon.

15. The Polynesian islands have a moist tropical climate and a luxuriant vegetation, consisting, however, of but few kinds of plants. The cocoa-nut palm and the bread-fruit tree are the most important of these. The inhabitants are light-colored Malays, and, with but few exceptions, savages.



Shooting Kangaroos.

16. The following are the principal chains:

The *Pelew Islands*, at the western termination of the belt; the *Caroline Islands*, trending 1000 miles from west to east, and consisting of a great number of atolls; the *Ralick* and *Radack Islands*, trending from north-west to south-east; the *Gilbert Islands*, on the equator; and the *Samoa*, or *Navigator Islands*.

17. The *Sandwich Islands* lie far to the north-east, but are the most important of all the Polynesian chains, on account of their position as a marine station between San Francisco and the countries on the other side of the Pacific. They are mountainous and volcanic. *Hawaii*, with the volcanoes *Mauna Kea* and *Mauna Loa*, is the largest. The inhabitants belong to the Malay race. They have advanced considerably in civilization, and are ruled by a king and parliament.

Honolulu, on the island of *Oahu*, is the capital.

QUESTIONS.—11. Describe the position of the Australian Islands. Where is New Guinea? What tribes inhabit it?

12. Where is New Caledonia? To whom does it belong? Where are New Britain and New Ireland? Where are the Salomon Islands? The New Hebrides?

13. Where is New Zealand? Of what two islands does it consist? What strait between the North and South islands? What is said of the surface? Of the climate? Who are the native inhabitants? To whom does New Zealand belong? What are the products? What is the capital? Where are the Feejee Islands? Describe them.

14. Describe the position of the Polynesian Islands. What are coral formations? What are reefs? What are atolls?

15. What is said of the climate and vegetation of the Polynesian Islands? By whom are they inhabited?

16. Where are the Pelew Islands? The Caroline Islands? The Ralick and Radack Islands? The Gilbert Islands? The Samoa, or Navigator Islands?

17. Where are the Sandwich Islands? Why are they important? Which is the largest? What volcanoes upon it? What is said of the inhabitants? How are they ruled? What is the capital?

MAP DRAWING.

MAP OF AUSTRALIA.

1. Draw four horizontal and six vertical lines, as in the annexed figure. You thus obtain a rectangle, which is divided into fifteen squares.

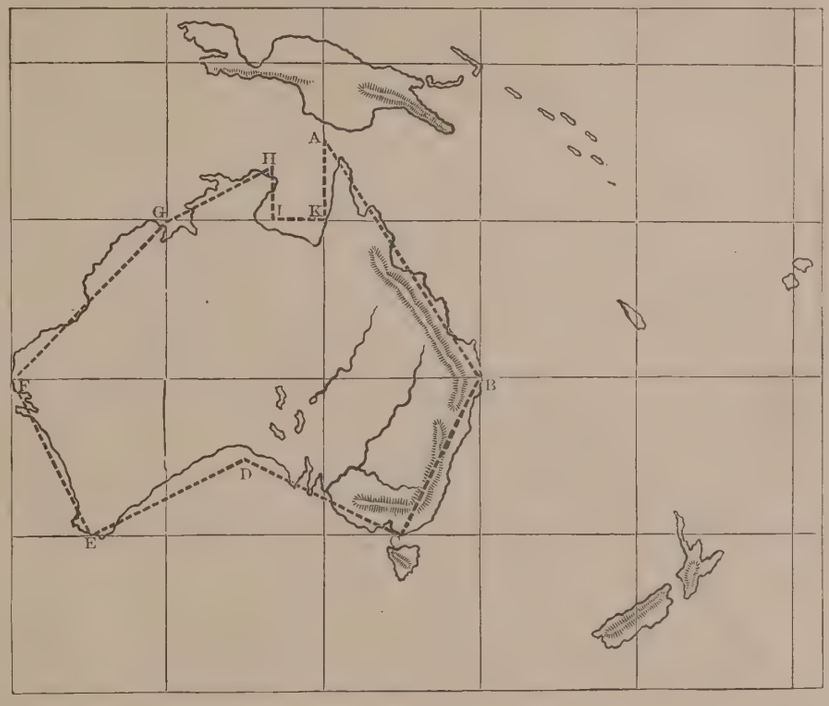
2. Point A is the center of the side of a square, and marks Cape York. Point B is the corner of a square, and marks the eastern extremity of the continent. Point C is the center of the side of a square, and marks the northern shore of Bass Strait. Point D is the center of a square.

3. Point E is the center of the side of a square. West of it lies Cape Leeuwin. Point F is the corner of a square. Northwest Cape lies north of it. Point G is the corner of a square, and marks Cambridge Gulf.

4. Point K is a corner of a square south of point A. Point I is one third of the side of a square west of point K, and point H is one third of the side of a square north of point I.

5. Connect the points by straight lines. A K, K I, and I H roughly mark the Gulf of Carpentaria. Draw the outline of the continent and the islands. New Guinea extends nearly through the squares north of Cape York. New Zealand lies south of the lowest right hand square.

6. Draw the principal rivers and mountains. Locate the chief towns, and letter the map. One side of a square is a little over 800 miles. Hence, the width of the continent, from Cape York to Bass Strait, is about $2\frac{1}{2} \times 800$, or 2000 miles, and the length from east to west 3×800, or 2400 miles.



GENERAL REVIEW.

What is the form of the earth? Name the cardinal and semi-cardinal points. Of what does the surface of the earth consist? Name the six grand divisions. The five oceans. What grand divisions are on the eastern hemisphere? On the western? What is an island? A peninsula? A cape? A bay? An isthmus? A strait? A lake? A river? A mountain chain? A table-land or plateau? A low plain? A volcano?

What is meant by the climate of a country? Name the three climatic zones in the northern hemisphere. Name the five races of men, and state where each race lives. Name the most highly civilized nations. What are the principal occupations of men?

NORTH AMERICA.

What mountain system in the western part? Where are the Rocky Mountains? The Sierra Nevada? The Cascade Mountains? The Coast Mountains? Where is the Apalachian system? Where are the White Mountains? The Green Mountains? The Alleghany Mountains? Where is the Blue Ridge? Where are the Black Mountains?

Describe the following rivers, and state where each rises, empties, and in what direction it flows; name their principal tributaries: Mackenzie. Saskatchewan. Nelson. St. Lawrence. St. John. St. Croix. Penobscot. Kennebec. Androscoggin. Merrimac. Connecticut. Hudson. Delaware. Susquehanna. Potomac. James. Roanoke. Santee. Savannah. Altamaha. Apalachicola. Alabama. Pearl. Mississippi. Des Moines. Missouri. Arkansas. Red. Wisconsin. Illinois. Ohio. Cumberland. Tennessee. Yazoo. Sabine. Trinity. Brazos. Rio Grande. Usumasinta. Rio Grande de Santiago. Colorado. San Joaquin. Sacramento. Columbia. Frazer. Yukon.

Describe the situation, surface, products, and the capitals of the following countries and states: Dominion of Canada. British Columbia. Maine. New Hampshire. Vermont. Massachusetts. Rhode Island. Connecticut. New York. New Jersey. Pennsylvania. Maryland. Delaware. Virginia. West Virginia. North Carolina. South Carolina. Georgia. Florida. Alabama. Mississippi. Louisiana. Texas. Tennessee. Kentucky. Ohio. Indiana. Illinois. Michigan. Wisconsin. Minnesota. Iowa. Missouri. Arkansas. Indian Territory. Kansas. Nebraska. Dakota. Montana. Wyoming. Colorado. New Mexico. Arizona. Utah. Montana. Idaho. Nevada. California. Oregon. Washington. Alaska.

Mexico. Guatemala. San Salvador. Honduras. Nicaragua. Costa Rica. Cuba. Hayti. Jamaica. Porto Rico. The Bahama Islands. Danish America.

In what country and on what river, lake, or branch of the ocean are the following cities situated: Quebec? Montreal? Kingston? Toronto? New Westminster? Bangor? Portland? Springfield, Mass.? Lowell? New York? Brooklyn? Troy? Rochester? Buffalo? Philadelphia? Reading? Pittsburgh? Baltimore?

Petersburg? Lynchburg? Wheeling? Wilmington? Charleston? Savannah? Jacksonville? Pensacola? Mobile? Galveston? San Antonio?

Matamoras? New Orleans? Vicksburg? Memphis? Cairo? St. Louis? Alton? Quincy? Keokuk? Davenport? Galena? Dubuque? St. Paul? Milwaukee? Chicago? Detroit? Toledo? Cleveland? Dayton? Cincinnati? Louisville? Evansville? Sioux City? Council Bluffs? Kansas City? San Francisco?

Mazatlan? Acapulco? Vera Cruz? Guadalajara? Chihuahua? Havana? Kingston?

SOUTH AMERICA.

What mountain system in the western part? Name the highest peaks of the Andes. Describe the following rivers: Magdalena. Orinoco. Amazon. San Francisco. La Plata.

Describe the situation, surface, products, and the capitals of the following states: Brazil. French, Dutch, and British Guyana. Venezuela. Columbia. Ecuador. Peru. Bolivia. Chili. Argentine Republic. Uruguay. Paraguay.

In what countries and on what waters are the following cities: Bahia? Panama? Callao? Valparaiso?

EUROPE.

What is the highest mountain system? Where are the Alps? What is the highest peak? Describe the French Mountains. The German Mountains. The Carpathian Mountains. The mountains of the Spanish peninsula. Of Italy. Of Turkey and Greece. Of the British Islands. The Ural Mountains.

Describe the following rivers: The Dwina. Neva. Duna. Vistula. Oder. Elbe. Weser. Rhine. Seine. Loire. Gironde. Duero. Tagus. Guadiana. Guadalquivir. Ebro. Rhone. Po. Danube. Dnieper. Don. Volga. Ural. Severn. Thames. Dal. Shannon.

Describe the situation, surface, products, and the capitals of the following states: Russia. Norway. Sweden. Denmark. The German Empire. Prussia. Austria. Bavaria. Wurtemberg. Baden. Holland. Belgium. Switzerland. France. Great Britain and Ireland. Spain. Portugal. Italy. Turkey. Greece.

In what countries and on what waters are the following cities: Moscow? Warsaw? Astrachan? Odessa? Dantzic? Hamburg? Bremen? Dresden? Cologne? Amsterdam? Havre? Bordeaux? Marseilles? Toulon? Lyons? Strasbourg? Genoa? Turin? Milan? Venice? Naples? Palermo?

Belgrade? Prague? Trieste? Toledo? Seville? Granada? Cadiz? Barcelona? Saragossa? Liverpool? Manchester? Birmingham? Leeds? Southampton? Edinburgh? Glasgow? Dublin? Belfast? Galway?

ASIA.

Where are the Himalaya Mountains? The Kuenlun Mountains? The Thian Shan? The Altai Mountains? The Great Khingan? The Hindoo Koosh Mountains? The Elbr Mountain? The Tauras Mountains? The Lebanon Mountains?

Describe the following rivers: Obe. Yenisei. Lena. Amoor. Hoang Ho. Yangtse Kiang. Cambodia. Brahmaputra. Ganges. Indus. Euphrates. Tigris. Syr. Amoo. Cashgar. Jordan.

Describe the situation, surface, products, and name the capitals or chief cities of the following states: Siberia. China. India. Turkestan. Persia. Turkey. Arabia. Japan. Java.

In what countries and on what waters are the following cities: Kiachta? Nankin? Shanghai? Hong Kong? Canton? Madras? Delhi? Bombay? Mecca? Medina? Smyrna? Jerusalem? Damascus? Bagdad? Bushire? Shiraz?

AFRICA.

Describe the surface of Africa. Locate the Lupata Mountains. The Dragon Mountains. The Kong Mountains. The Atlas Mountains. Describe the Sahara. The Soudan. Describe the following rivers: Nile. Niger. Congo. Coanza. Orange. Zambeze.

Describe the situation, surface, products, and the capitals of the following countries: Morocco. Algeria. Tunis. Tripoli. Dominion of the Khedive. Abyssinia. Cape Colony. Liberia. Madagascar.

AUSTRALIA.

Describe the Australian Alps. The Blue Mountains. The Liverpool Range. The Murray River. Where are the following colonies, and what is the capital of each: Queensland? New South Wales? Victoria? South Australia? West Australia?

MISCELLANEOUS.

Describe the position of the following islands, and give the direction of those forming chains: Greenland. Iceland. Newfoundland. The Bahama Islands. The Greater Antilles. The Lesser Antilles. Tierra del Fuego. The Aleutian Islands.

Kurile Islands. Islands of Japan. Philippine Islands. Molucca Islands. Borneo. Celebes. New Guinea. New Hebrides. New Caledonia. New Zealand. Tasmania. Caroline Islands. Feejee Islands. Sandwich Islands. Ceylon. Madagascar.

Great Britain. Ireland. Sardinia. Corsica. Sicily. Candia. Madeira. Canary Islands. Cape Verde Islands. St. Helena.

Describe the following peninsulas: Nova Scotia. Labrador. Florida. Yucatan. California. Alaska. Kamtschatka. Corea. Malacca. Farther India. India. Arabia. Spanish peninsula. Italian peninsula. Turkish peninsula. Asia Minor. Scandinavian peninsula.

Where are the following gulfs, bays, and seas: North Sea? Baltic Sea? Mediterranean Sea? Adriatic Sea? Archipelago? Black Sea? Sea of Azov? Gulf of Sidra? Gulf of Cabes? Gulf of Guinea?

Red Sea? Arabian Sea? Persian Gulf? Bay of Bengal? South China Sea? East China Sea? Japan Sea? Sea of Ochotsk? Behring Sea? Gulf of California? Caribbean Sea? Gulf of Mexico? Chesapeake Bay? Bay of Fundy? Hudson Bay? Baffin Bay? Gulf of Carpentaria? Spencer Gulf? Australian Bight?

What lands are separated and what waters connected by the following straits: Davis Strait? Hudson Strait? Florida Strait? Magellan Strait? Behring Strait? Cook Strait? Bass Strait? Torres Strait? Strait of Gibraltar? Bosporus? Dardanelles? Strait of Dover? Mozambique Channel? Cattegat? The Sound?

What lands are connected and what waters separated by the Isthmus of Panama? The Isthmus of Suez?

In what mountain chains are the following peaks: Popocatepetl? Iztaccihuatl? Cofre de Perote? Colima? Jorullo? Pike's Peak? Spanish Peaks? Longs Peak? Fremont Peak? Mount Brown? Mount Hooker? Mount Shasta? Mount Hood? Mount St. Helens? Mount St. Elias? Mount Fairweather?

Aconcagua? Illimani? Sorata? Chimborazo? Mont Blanc? Monte Rosa? Mount Ararat? Mount Everest? Mount Kanchinjinga?

Where are the following lakes, and by what rivers are they drained: Great Bear Lake? Great Slave Lake? Athabasca Lake? Lake Winnipeg? Lake Superior? Lake Huron? Lake Michigan? Lake St. Clair? Lake Erie? Lake Ontario? Lake Champlain? Lake George? Moosehead Lake? Schoodic Lake? Lake Winnipiseogee? Great Salt Lake? Nicaragua Lake? Lake Maracaybo? Lake Titicaca?

Ladoga Lake? Onega Lake? Lake Wener? Lake Wetter? Caspian Sea? Aral Sea? Lake Baikal? Lake Balkash? Lake Albert? Lake Victoria? Lake Tanganyika? Lake Tsad? Lake Eyre? Lake Torrens? Lake Gairdner? Amadeus Lake?

What waters would you cross and in what directions would you sail in going from New York to San Francisco? From New York to Liverpool? From London to St. Petersburg? From New York around Cape of Good Hope to Calcutta? From London to Venice? From Calcutta to Melbourne? From Melbourne to San Francisco? From Havana to New Orleans? From Chicago to Buffalo? From Cincinnati to New Orleans? From Galveston to Mobile? From Canton to Havre? From Bremen to Yokohama? From Cape Town to Bombay?

Through what waters would a vessel pass in sailing from Odessa to Liverpool? From Bremen to Baltimore? From Dantzic to New Orleans? From San Francisco to the Isthmus of Panama? From the Isthmus of Panama to New York?

What mountains and rivers would you cross in going in a direct line from Paris to Venice? From Madrid to Berlin? From Peking to Bombay? From New York to San Francisco? From Rio Janeiro to Quito? From Washington to Cincinnati? From Portland, Me., to Buffalo?

TABLES.

DIMENSIONS OF THE EARTH.

	MILES.
Equatorial diameter,	7,925.^{604}
Polar diameter,	7,899.^{114}
Circumference on Equator,	24,899.^{022}
Surface in square miles,	196,900,143.^{000}
Volume in cubic miles,	259,400,000,000.^{000}
Specific gravity,	5.^{46}
Weight in tons,	6,000,000,000,000.000,000,000.^{000}

HEIGHTS OF MOUNTAINS.

	FEET ABOVE SEA-LEVEL.
Abyssinian Plateau,	6,075
Aconcagua; Chili,	23,910
Adams Peak; Ceylon,	7,420
Agua, volcano, del; Guatemala,	13,758
Alps; Switzerland,	8,500
Alps; Transylvania,	4,000
Altai Mountains; Mongolia,	6,300
Andes; South America,	12,000
Antisana, volcano; Ecuador,	19,137
Apalachian Mountains; United States,	3,000
Apennine Mountains; Italy,	4,000
Ararat, Mount; Asia Minor,	17,130
Arequipa; Bolivia,	20,320
Ascension Island; Atlantic Coast, Africa,	2,870
Balsam Cone; North Carolina,	6,671
Ben Nevis; Scotland,	4,368
Bernina; Switzerland,	13,290
Black Dome; North Carolina,	6,707
Black Forest Plateau; Germany,	2,500
Blanc, Mont; France,	15,744
Blue Mountains; New South Wales,	3,000
Bohemian Forest Plateau; Bohemia,	2,500
Brocken, Mount; Germany,	3,739
Brown, Mount; British Columbia,	16,000
Cantal, Mont; France,	6,108
Cayambe, volcano; Ecuador,	18,875
Central American Cordilleras,	7,000
Chimborazo, volcano; Ecuador,	20,517
Chiriqui, volcano; Panama,	11,265
Chuquibamba, volcano; Peru,	21,000
Cibao Mountains; Hayti,	7,000
Coast Range; United States,	3,000
Cobre Range; Cuba,	7,200
Cook, Mount; south New Zealand,	12,349
Cotopaxi, volcano; Ecuador,	16,291
Cradle Mountain; Tasmania,	5,069
Dapsang, Mount; Thibet,	28,278
Deccan Plateau; India,	2,000
Demavend, volcano; Persia,	18,846
Dhawalagiri, Mount; Nepal,	26,826
Dreiherrn Spitz; Austria,	11,457
Egmont, volcano; north New Zealand,	8,840
Elbrooz, Mount; Caucasia,	18,493
Erz Mountains; Germany,	2,500
Etna, Mount, volcano; Sicily,	10,874
Everest, Mount; Nepal,	29,002
Fairweather, Mount; Alaska,	15,500
Finster Aar Horn; Switzerland,	14,026
Fogo, volcano; Cape Verde Islands,	9,157
Franklin, Mount; south New Zealand,	10,000
Fremont Peak; Wyoming Territory,	13,570
Fuego, volcano, de; Guatemala,	12,790
Fusi-yama, volcano; Japan,	14,177
Gedee, volcano; Java,	9,850
George, Mount; New South Wales,	3,620
Gobi, Desert of; Mongolia,	4,623
Gran Sasso; Italy,	9,543
Gross Glockner; Austria,	12,421
Hartz Mountains; Germany,	1,500
Hecla, volcano; Iceland,	5,110
Himalaya Mountains; Asia,	19,000
Hindoo Koosh Mountains; Afghanistan,	18,000
Hood, Mount; Oregon,	11,225
Hooker, Mount; British Columbia,	16,750
Horeb, Mount; Arabia,	8,593
Hotham, Mount; Victoria,	7,500
Illimani, volcano; Bolivia,	21,149
Indrapura, volcano; Sumatra,	12,500
Iseran, Mont; France,	13,270
Iztaccihuatl, volcano; Mexico,	17,077
Jorullo, volcano; Mexico,	4,265
Jungfrau; Switzerland,	13,720
Jura Mountains; France,	3,000
Kanchinjinga, Mount; Himalayas,	28,156
Karakorum Mountains; East Turkestan,	18,500
Kasbek, Mount; Caucasia,	16,540
Kenia, Mount; east Africa,	18,000
Kilimanjaro, Mount; east Africa,	18,715
Kosciusco, Mount; Victoria,	7,285
Kuenlun Mountains; Thibet,	18,000
Latrobe, Mount; Victoria,	7,300
Lomnitz Peak; Hungary,	8,685
Long's Peak; Colorado,	14,271
Maladetta, Mount; Pyrenees,	11,168
Mansfield, Mount; Vermont,	4,430
Marcy, Mount; New York,	5,379
Matterhorn; Switzerland,	14,836
Mauna Kea; Sandwich Islands,	13,953
Mauna Loa; Sandwich Islands,	13,760
Mexican Plateau; Mexico,	7,482
Miltsin, Mount; Morocco,	11,400
Misery, Mount; St. Christopher Island (Lesser Antilles),	4,454
Mitchell, Mount; North Carolina,	6,582
Mont d'Or; France,	6,188
Morne Diablotin; Dominica Island,	5,315
Mulahacen, Mount; Spain,	11,663
Murchison, Mount; British Columbia,	15,700
Nanda Devi; Himalayas,	25,661
Oeta, Mount; Greece,	7,080
Olympus, Mount; Washington Territory,	8,200
Olympus, Mount; Turkey, Europe,	9,759
Orizaba, volcano; Mexico,	17,374
Orosi, volcano; Costa Rica,	5,200
Parnassus, Mount; Greece,	8,068
Peaks of Otter; Virginia,	3,993
Pelee, Mont; Martinique Island,	4,706
Perdu, Mont; Spain,	10,994
Pichincha, volcano; Ecuador,	15,924
Pike's Peak; Colorado,	14,216
Pointe des Ecrins; France,	13,462
Popocatepetl, volcano; Mexico,	17,784
Puy de Dome; France,	6,220
Pyrenees Mountains; Spain,	8,000
Roan Mountain; North Carolina,	6,306
Rocky Mountains; North America,	11,000
Rosa, Monte; Switzerland,	15,208
Sahama, volcano; Bolivia,	22,350
San Salvador, volcano; San Salvador,	7,354
Schar Dagh; European Turkey,	7,000
Schneehatten, Mount; Norway,	7,565
Schreckhorn; Switzerland,	13,410
Shasta, Mount; California,	14,442
Sierra Nevada; California,	9,000
Sinai, Mount; Arabia,	9,304
Singallang, volcano; Sumatra,	15,000
Snowdon, Mount; Wales,	3,589
Sorata Peak; Bolivia,	21,286
Souffriere, volcano; Guadaloupe Island,	5,113
Spanish Peak (west); Colorado,	13,620
Spitz Kop; Cape Colony,	10,240
St. Elias, Mount; Alaska,	19,500
St. Helens, Mount; Washington Territory,	9,750
Sudetes Mountains; Germany,	3,000
Sulitelma, Mount; Norway,	6,178
Thian Shan Mountains; East Turkestan,	18,000
Thibet Plateau; Thibet,	13,500
Tolima, volcano; United States of Columbia,	18,020
Toluca, volcano; Mexico,	15,542
Tongariro, volcano; north New Zealand,	6,500
Tupungato, volcano; Chili,	22,016
Velino, Monte; Italy,	8,183
Vesuvius, Mount, volcano; Italy,	8,479
Vindhya Mountains; India,	2,500
Viso, Monte; France,	12,598
Washington, Mount; New Hampshire,	6,288
William, Mount; West Australia,	3,600

SIZE OF RIVERS.

	AREA OF BASIN IN SQUARE MILES.	LENGTH. MILES.
Amazon, Brazil,	2,681,000	3,596
Amoor, East Asia,	1,063,000	2,673
Arkansas, United States,	189,000	1,514
Colorado, United States,	223,000	1,000
Columbia, United States,	338,000	1,383
Congo, Africa,	1,202,000	2,700
Connecticut, United States,	11,612	250
Danube, Austria,	308,280	1,992
Delaware, United States,	13,767	300
Dnieper, Russia,	180,715	1,020
Don, Russia,	169,870	1,088
Duero, Spain,	35,400	461
Duna, Russia,	42,500	668
Ebro, Spain,	33,400	484
Elbe, Germany,	59,500	737
Euphrates, Asiatic Turkey,	237,000	2,005
Ganges, India,	403,000	1,844
Hoang Ho, China,	714,000	2,812
Indus, India,	400,000	1,613
Lena, Siberia,	775,000	2,766
Loire, France,	53,100	599
Mackenzie, British America,	442,000	2,120
Mississippi-Missouri System, U.S.	1,256,000	4,194
Mississippi proper,	1,256,000	2,616
Missouri,	518,000	2,908
Murray, Australia,	500,000	1,705
Nieman, Russia,	42,700	550
Niger, West Africa,	1,000,000	2,990
Nile, Egypt,	1,167,000	3,895
Obe, Siberia,	1,360,000	2,674
Ohio and Alleghany, U. S.,	214,000	1,265
Orange, South Africa,	446,474	1,152
Orinoco, Venezuela,	310,000	1,500
Petchora, Russia,	64,860	737
Po, Italy,	25,500	461
Red, Arkansas,	97,000	1,200
Rhine, Germany,	86,740	876
Rhone, France,	46,800	645
Rio de la Plata, Paraguay,	1,250,000	2,500
Rio Grande, Texas,	180,000	1,800
San Francisco, Brazil,	248,000	1,613
Saskatchewan, British America,	160,000	1,918
Seine, France,	44,650	498
Shannon, Ireland,	6,946	224
St. Lawrence, Canada,	298,000	2,120
Susquehanna, Pennsylvania,	27,500	400
Tagus, Spain,	30,900	553
Thames, England,	4,847	215
Ural, Russia,	106,000	1,079
Vistula, Russia,	74,400	691
Volga, Russia,	637,820	2,351
Weser, Germany,	25,500	313
Yenisei, Siberia,	999,000	3,688
Zambeze, east Africa,	546,000	2,300

DIMENSIONS OF LAKES.

	AREA.	HEIGHT ABOVE SEA-LEVEL.	DEPTH
Albert Nyanza, Africa,	28,000	2,500	——
Aral, Russian Turkestan,	26,926	160	222
Baikal, Siberia,	13,287	1,280	319
Balkash, Siberia,	8,544	532	74
Caspian Sea, Asia,	178,866	—85	3,000
Chapala, Mexico,	425	6,394	50
Como, Italy,	61	697	1,924
Constance, Switzerland,	184	1,289	912
Dead Sea, Palestine,	489	—1,285	1,278
Erie, United States,	9,493	573	204
Garda, Italy,	55	227	——
Great Salt Lake, Utah,	2,600	4,210	——
Huron, United States,	23,684	582	750
Ladoga, Russia,	6,630	—49	276
Leman, or Geneva, Switzerland,	222	1,230	1,050
Maelar, Sweden,	467	2	186
Maggiore, Italy,	57	687	2,612
Maracaybo, Venezuela,	7,820	——	——
Michigan, United States,	23,903	582	900
Nicaragua, Central America,	2,800	108	320
Onega, Russia,	3,388	238	1,332
Ontario, United States,	7,654	247	606
Rainy Lake, British America,	595	1,035	——
Superior, United States,	32,290	602	1,000
Tanganyika, Africa,	11,000	2,800	——
Titicaca, Peru,	3,209	12,846	716
Tsad, Africa,	12,800	1,100	20
Victoria, Africa,	30,000	3,300	——
Wener, Sweden,	1,998	143	804
Wetter, Sweden,	722	290	1,626
Winnipeg, British America,	9,000	628	—72

AREA AND POPULATION OF THE EARTH.

(From Almanach de Gotha 1884, the United States Census of 1880, and State Censuses of 1884 and 1885.)

	Area in Sq. Miles.	Population.
Asia,	17,117,204	792,890,779
Africa,	11,511,500	205,855,053
North America,	9,349,585	73,776,564
South America,	6,889,135	29,842,734
Europe,	3,928,252	332,728,509
Australia and Pacific Is.,	3,658,627	4,324,141
Summary, **the World,**	52,454,303	1,439,417,780
Siberia, including Islands,	4,826,168	3,947,903
Russian Central Asia—Akmolinsk, Semipalatinsk, Turgansk (inc. Aral Sea), and Uralsk,	777,697	1,828,112
Russian Turkestan,	413,328	3,247,584
Caspian Sea,	149,083	
Trans-Caspian Province,	126,281	203,000
Trans-Caucasia,	85,955	3,742,353
Armenia (inc. Kars),	9,969	176,282
Total, Russia in Asia,	*6,388,481*	*13,145,234*
Turkestan,	194,325	3,280,000
Asiatic Turkey,	478,707	14,855,607
El Hejaz, Aseer, Yemen, El Hasa, Midian, and the Sinai Peninsula,	250,636	1,277,293
Island of Samos,	181	38,274
Island of Cyprus,	3,707	186,084
Total, Turkey in Asia,	*733,231*	*16,357,258*
Independent Arabia,	968,103	3,700,000
Aden,	8	34,860
Persia,	636,368	7,653,600
Afghanistan,	278,634	4,000,000
Kafiristan,	19,956	500,000
Beloochistan,	106,762	350,000
China Proper (eighteen provinces, inc. Hainan and Formosa),	1,553,933	350,000,000
Mantchooria,	379,332	12,000,000
Mongolia,	1,451,961	2,600,000
Thibet,	651,697	6,000,000
East Turkestan,	431,935	580,000
Corea,	84,244	7,294,367
Total, Chinese territory,	*4,553,102*	*378,474,367*
Hong Kong,	32	160,402
Macao,	5	77,230
Japanese Empire,	147,663	36,357,368
British India proper, (inc. Cashmere and Assam),	1,361,040	248,833,564
Manipore,	7,597	126,000
British Birmah,	88,552	3,707,646
Birmah (tribu'y since '85)	176,448	4,000,000
Ceylon, Maldive, and Laccadive Islands,	27,367	2,758,019
Straits Settlements,	1,445	423,384
Total British India,	*1,662,449*	*259,848,613*
Portuguese possessions in India proper,	1,295	444,987
French poss. in Ind. prop.,	196	276,649
Himalayan States (Nepal, Bhotan, and Tribes North of Assam),	90,350	3,300,000
Tribes E. and S. of Assam,	25,290	200,000
Siam,	280,637	5,750,000
Anam,	170,077	21,000,000
French Cochin China,	22,956	1,597,013
Cambodia,	32,379	890,000
Independent Malacca,	31,467	300,000
Sunda and Molucca Is.,	655,890	28,867,000
Phillipine and Sulu Is.,	114,356	6,300,000
Andaman Islands,	2,508	26,198
Nicobar Islands,	684	
Total, **Asia,**	17,117,204	792,890,779
Morocco (inc. Tuat),	313,641	6,152,179
Algeria,	257,553	3,310,412
Tunis,	44,922	2,100,000
Tripoli (inc. Fezzan and Barca),	398,976	1,010,000
Sahara,	2,386,262	2,500,000
Egypt (inc. Egyptian Soudan, Nubia, etc.),	1,120,012	16,417,474
Abyssinia,	128,679	3.000,000
Gallas Land and Somauli Land,	732,446	15,500,000
Soudan and Equatorial Africa,	2,965,600	122,400,000
Portuguese Poss. in South Africa, (inc. Angola, Mozambique, etc.),	695,192	10,000,000
British Poss. in So. Africa, (inc. Cape Colony, Basuto Land, Griqua Land, Caffraria, and Natal),	261,474	1,728,492
Transvaal,	110,183	815,000
Orange River Republic,	41,482	133,518
Native States of S. Africa,	1,816,661	16,296,350
Madagascar and Coast Is.,	228,557	3,500,000
Other Islands,	9,860	991,628
Total, **Africa,**	11,511,500	205,855,053
Greenland, Iceland, and Jan Mayen,	878,357	82,500
Dom. of Canada, inc. Can. portion of Great Lakes,	3,232,304	4,324,810
Arctic Archipelago,	502,347	
Newfoundland,	42,730	179,509
St. Pierre and Miquelon Is.	89	5,224
Bermuda Islands,	19	13,948
United States (inc. Alaska),	3,602,990	52,119,942
Amer. portion Great Lakes,	65,177	
Mexico,	751,455	9,787,629
Cent. Amer. (exc. Panama),	179,724	2,645,552
West Indies,	94,393	4,617,450
Total, **North America,**	9,349,585	73,776,564
Columbia (inc. Panama),	437,942	3,000,000
Venezuela,	439,233	2,075,245
Guyana—British,	85,422	252,186
" Dutch,	46,070	69,856
" French,	46,877	36,000
Brazil,	3,219,000	11,831,326
Ecuador (inc. Galapagos Islands),	134,108	1,146,093
Peru,	416,493	3,008,000
Bolivia,	500,870	2,325,000
Chili,	245,857	2,241,182
Argentine Republic,	1,094,968	2,942,000
Paraguay,	92,004	476,048
Uruguay,	72,170	438,245
Falkland Islands,	4,839	1,553
South Polar Region,	53,282	
Total, **South America,**	6,889,135	29,842,734
Great Britain and Ireland,	121,603	35,172,976
Gibraltar,	2	18,381
Helgoland,	5	2,001
Malta,	120	149,782
France,	200,705	37,399,409
Corsica,	3,377	272,639
Monaco,	8	10,108
Andora,	175	5,800
Spain,	191,361	16,269,540
Balearic Islands,	1,860	296,996
Canary Islands,	2,944	292,185
Portugal,	34,418	4,306,554
Azores Islands,	922	269,401
Madeira Islands,	315	133,955
Belgium,	11,372	5,585,846
Netherlands,	12,741	4,172,971
Luxemburg,	999	209,570
Denmark,	14,788	1,969,039
Faroe Islands,	515	11,220
Germany,	210,164	45,234,061
Switzerland (inc. lakes),	15,980	2,846,102
Austro-Hungary,	241,377	37,870,054
Liechtenstein,	61	9,124
Bosnia, Herzegovina, and Novibazar,	23,577	1,326,450
Italy,	92,239	24,849,725
Sicily,	9,961	2,927,901
Sardinia,	9,205	682,002
San Marino,	33	7,816
Norway,	125,646	1,913,500
Sweden,	173,967	4,579,115
Russia (inc. Azov Sea),	2,059,964	85,058,424
Nova Zembla, Spitzbergen, and Franz Jos. Land,	81,447	
Cis-Caucasia,	86,572	2,168,904
Total, Russia in Europe,	*2,227,983*	*87,227,328*
Turkey (including Crete),	63,876	4,490,000
Eastern Rumelia,	13,861	815,946
Bulgaria,	24,700	1,998,983
Total, Turkey in Europe,	*102,437*	*7,304,929*
Roumania,	50,173	5,376,000
Servia,	18,757	1,810,606
Montenegro,	3,486	236,000
Greece and Islands,	24,976	1,979,423
Total, **Europe,**	3,928,252	332,728,509
Australia and Coast Is.,	2,945,106	2,271,726
Tasmania,	26,213	118,923
New Zealand and adj. Is.,	105,401	545,007
New Guinea and adj. Is.,	311,952	500,000
Sandwich Islands,	6,567	57,985
Other Islands of Pacific,	61,458	830,500
South Polar Region,	201,930	
Total, **Australia, Etc.,**	3,658,627	4,324,141
Alabama,	52,250	1,262,505
Arkansas,	53,850	802,525
California,	158,360	864,694
Colorado,	103,925	194,327
Connecticut,	4,990	622,700
Delaware,	2,050	146,608
Florida,	58,680	269,493
Georgia,	59,475	1,542,180
Illinois,	56,650	3,077,871
Indiana,	36,350	1,978,301
Iowa,	56,025 ('85)	1,753,980
Kansas,	82,080 ('85)	1,268,562
Kentucky,	40,400	1,648,690
Louisiana,	48,720	939,946
Maine,	33,040	648,936
Maryland,	12,210	934,943
Massachusetts,	8,315 ('85)	1,941,465
Michigan,	58,915 ('84)	1,853,658
Minnesota,	83,365 ('85)	1,117,798
Mississippi,	46,810	1,131,597
Missouri,	69,415	2,168,380
Nebraska,	77,510 ('85)	740,645
Nevada,	110,700	62,266
New Hampshire,	9,305	346,991
New Jersey,	7,815	1,131,116
New York,	49,170	5,082,871
North Carolina,	52,250	1,399,750
Ohio,	41,060	3,198,062
Oregon,	96,030	174,768
Pennsylvania,	45,215	4,282,891
Rhode Island,	1,250 ('85)	304,284
South Carolina,	30,570	995,577
Tennessee,	42,050	1,542,359
Texas,	265,780	1,591,749
Vermont,	9,565	332,286
Virginia,	42,450	1,512,565
West Virginia,	24,780	618,457
Wisconsin,	56,040 ('85)	1,563,423
Delaware Bay,	620	
Raritan and N. Y. bays,	100	
Total, States,	2,088,135	51,049,216
Alaska,	577,390	30,156
Arizona,	113,020	40,440
Dakota,	148,445	135,177
District of Columbia,	70	177,624
Idaho,	84,800	32,610
Indian Territory,	64,690	76,895
Other Indians,		179,232
Montana,	146,080	39,159
New Mexico,	122,580	119,565
Utah,	84,970	143,963
Washington,	69,180	75,116
Wyoming,	97,890	20,789
Public Land,	5,740	
Total, Territories,	1,514,855	1,070,726
Total, **United States,**	3,602,990	52,119,942

VOCABULARY.

KEY.

Fāte	Whạt	Tẽrm	i = obscure	Wọlf	Nŭt	Mў	ḥ = y	q̄u = k	D = th in this
Făt	ạ = obscure	ẹ = obscure	Nōte	Fo͝od	Fo͝ot	Hўmn	hu = w	ş = z	CH, G, K = German ch
Câre	Mē	Fīne	Nŏt	Rọde	Pụsh	ç, ch = k	j = y	si = sh	N strongly aspirated
Făr	Mĕt	Tín	Dọne	o = obscure	ü = French u	e, eh = k	ḷ = y	th as in thine	N = ng
Lȧst	Thêre	Pïque	Fôr	ŏ = e in her	û = w	ġem	n as in link	ti = shī	R stronger than rr in terror
Fạll	Veil	Fïrm	Dọ	Hūe		ġet	ñ = ny	ŵ = v	*Letters italicized are silent*

Ȧb′bä J̌ä′rĕd
Ab-bị-tīb′bē
Ab′ys-sīn′ĭ-a
Ä-eä-pül′eo
Ä-eon-eä′guä
Ad′ẹ-lā′*i*de
Ā′dẹn
Ad′ĭ-ron′dack
Ad′rĭ-ạn-ō′pl*e*
Ad′rĭ-ăt′ie
Af′rĭ-eạ
Ăf-ġ*h*ăn′is-tăn′
Ä′ġuä
Ä′ġuäs Eä-lĭ-ĕn′tĕs
Ä-gül′ḥäs
*A*iks
Āix lä Ȼhä′pĕl*le*′
Al′ạ-bȧ′mạ
A-lȧs′kạ
A′lä-täu′
Ȧl′bạ-nў
Ȧl′bẹ-märl*e* (Eng.)
Al′bẹ-märl*e*′ (U.S.)
Ạ-leū′ti-ạn
Al-ġïērs′
Ạl′lẹ-ġ*h*ā′ny
Ȧlps
Ȧl-ta*ï*′
Ạl′tạ-mạ-hạ′
Ạl′tọn
Ä-lü′tä
Am′ạ-zọn
A-mĕr′ĭ-eạ
Ạm′*h*erst
Ä-mïl′päs
Ä-mōo′
Ä-mōor′
Ä-moy′
An-ạ-cŏs′tĭ-ạ
A-năm′
An′dēş
An-dōr′rä
An′drọs-cōg′gin
An′ġẹrs
An-gō′lạ
An-năp′o-lis
An′tĭ-eŏs′tĭ
Ăn-tïl*les*′
Ăn-tị-sä′nä
Ä-pä′chê
Ap′ạ-lăch′ee
Ap′ạ-lā′chĭ-ạn
Ap′ạ-lăch′ĭ-eō′lạ
Ä′pê-nä′eä
Ap′ẹn-nīne
Ä-pü′rẹ
Ạ-rā′bĭ-ạ
Ä-rä-fü′räs
Är′ạ-gō
Är′ạl
Ar-ăn′sąs
Är′ạ-rat
Är′chị-pĕl′a
Are′tïc
Ä-rẹ′nä
Ä-rẹ-qūï′pä
Är′ġen-tï′nä
Är′ġen-tine
Är-gōon′
Ä-re′eä
Ä′rị-zō′nạ
Är-kăn′sạ
Är′no
Är′yăn
As-çĕn′si*o*n
Asia (ā′shĭ-ạ)
As-sümp′ti*o*n
As-trạ-chăn′
Ät-bä′rä
Ătch-af-ạ-la*ў*′ạ
Ătch′ị-son
Atchafalaya (atch-af-ạ-lī′ạ)
Äth′ạ-bäs′eä
At-lăn′tạ
Ạt-lăn′tie
Át′las
Ạu-gŭs′tạ
Ạu-rō′rạ
Ạus′tĭn
Ạus-trā′lĭ-ạ
Ạus′trĭ-ạ
Auvergne (ō-vĕrn′)
Ạ-zōres′
Äz′ov
Ăb′el-măn′deb
Bä′dẹn
Băf′fin
Bäg-däd′
Bạ-hä′mạ
Bä-*h*ï′ä
Bal′käl′
Băl′e-ăr′ie
Bäl-kän′
Bäl-käsh′
Băl′la-răt′
Bạl′tie
Bạl′tĭ-mōr*e*
Băng′kŏk′
Băn′gôr
Băng′wẹ-ō′lō
Bä-rä-tä′rĭ-ä
Bär′eä
Bär′ço-lō′na
Bȧs*le*
Ba-tā′rĭ-ạ
Baton Rouge (bät′un rōozh)
Bạ-vä′rĭ-ạ
Bē*h*r′ing
Bĕl-fȧst′ (Ireland)
Bĕl′fast (U. S.)
Bĕl′ġĭ-ŭm
Bĕl′grād*e*′
Belize (bä-leez′)
Bĕl*le* Īs*le*′
Bĕl-ōō-chĭs-tän′
Belur Ta*g*h (bō′lôr′)
Bĕn-ä′rĕs
Bĕn Cru*a*′cпạn
Bĕn-ġal′
Bĕn-ġue′lä
Bĕn-ïn′
Bĕn-Mōr*e*′
Bĕn-Nē′vĭs
Bĕn-Wў′vĭs
Bĕr′lĭn
Bĕr-mū′dạ
Bĕrn*e*
Bĕʀ-nĭ′nä
Bĭ-ăf′rạ
Bïr′mä*h*
Bïr′mĭng-*ham*(ŭm)
Bĭs′cāy
Bĭş′märck
Blạnc
Blān′eo
Bō-gō-tä′
Boise (bwä-zā′)
Bō-k*h*ä′rä
Bō-lïv′ĭ-ạ
Bō-lōgn̄′ä
Bōm-bāy′
Bō-nïn′
Bōō-thī-ä
Bordeaux (bo*ʀ*-dō′)
Bôr′nē-o
Bŏs′pō-rŭs
Boü-lō*gne*′
Boü-ve*t*′
Brä-mạ-püt′rạ
Brạ-zïl′
Brä′zos
Brĕm′ẹn
Brĕs′la*u*
Brĕst
Breton (brit′ŭn)
Brïs′bāne
Brŏck′ẹn
Brŏok′lўn
Brŭn*n*
Brŭs′sẹls
Bū′cha-rĕst′
Bū′dạ Pĕst*h*′
Buenos Ayres (bō′nus ā′riz)
Büf′fạ-lō
Bü-shïre′
Büz′zạrds
Cäb′ẹs
Ȼạ-bōol′
Cä′dïz
Ȼa*ï*′rō (Egypt)
Cä*ï*′rō (U. S.)
Căl′*ai*s
Căl-cŭt′tạ
Căl′ĭ-fôr′nĭ-ạ
Căl-lā′o
Căm-bō′dĭ-ạ
Căm′brĭ*dg*e
Cămp′*b*ell
Căm-pēa′chy
Căn′dĭ-ạ
Ȼạ-nā′rĭēs
Căn-ăv′ĕr-al
Căn dạ hăr′
Căn′dĭ-ạ
Căn-tā′brĭ-ạn
Ȼaɴ′tăl′
Căn-tŏn′ (China)
Căn′tọn (U. S.)
Cä-qūe′tä
Ȼạ-răc′ăs
Căr′ĭb-bē′ạn
Cärls′rü*h*e
Căr′ō-lī′na
Căr-pā′thĭ-ạn
Căr′pĕn-tā′rĭ-ạ
Căr′răn-tū′ăl
Căr′tạ-ġē′na
Căs′cō
Căsh-gär′
Căsh-mēr*e*′
Cä′sī-qūī-ä′rĭ
Căs′pĭ-ạn
Cä-tō′chê
Căts′kĭl*l*
Căt-tä′rō
Căt′tẹ-ġăt
Ȼa*u*-cā′si*a*n
Ȼa*u*′ca-sŭs
Ȼa*ў*-ăm′be
Ȼa*ў*-ĕnn*e*′
Çĕl′ē-bęs
Cerro de Chiriqui (thĕr′ʀo dā chē-rē-kee′)
Cettigne (chĕt-teen′yā
Çe-vĕnn*es*′
Çēy′lọn
Çhăm-plāin′
Çhä-pā′lā
Chăt′tạ-hōō′che
Chăt′tạ-nōō′gạ
Çhaudiere (shō′dẹ-ên′)
Chĕl′sea
Chĕs′ạ-pēak*e*
Çhē*y*-ĕnn*e*′
Çhĭ-eạ′gō
Chïe′ọ-pee′
Chĭ-*hua*′*hua*
Chïl′ĭ
Chïm′bō-rä′zō
Chī-nēse′
Chïp′pē-wā
Chĭ-rĭ-qūī′
Chō-wân′
Chrïs′tĭ-ăn′ạ
Chrïs′tĭ-ä′nĭ-ä
Chü-qūī-bäm′bä
Çĭ-bä′ō
Çĭn′çĭn-na′tĭ
Çlēve′lănd
Cō-ăn′zạ
Cōb′lĕntz
Cō′brẹ
Cō′chä-bäm′bä
Cō′fre dẹ Pe-rō′tẹ
Ȼọ-hōes′
Ȼọ-lï′mä
Ȼọ-lō*gne*′
Cō′pẹn-hā′ġẹn
Cōr-dïl′lẹr-ạs
Cōr′dọ-vạ
Cōo′sä
Cō′pẹn-hā′ġẹn
Cōr-dïl′lẹr-ạs
Cōr′sï-ca
Cō′se-ġuï′nä
Cōs′tä Rï′eä
Cotopaxi (kō′tọ-păks′e)
Côteau du Mïs-soŭ-rī (côt-tō′-)
Cū′bạ
Cüz′eō
Çўe′lạ-dēs
Dänʀ′nä
Dăl
Dạ-măs′eus
Dā′nạ
Dā′nish
Dănt′zĭc
Dăn′ūbe
Dăp′ṣăng
Där′dạ-nĕl*les*′
Där′für′
Dä-rị-ĕn′
Dĕc′ẹan
Dĕl′ạ-wa*re*
Dĕl′ăĭ (Asia)
Dĕl′hī (U. S.)
Dĕm′ä-vĕnd′
Dĕn′mark
Dēs Moine*s*′
Dẹ Tẹ-ī′dẹ
Dhawalaghiri (dạ-wŏl′ạ-ġĕr′rẹ)
Dī-ăb′lō-tĭn′
Dī-ā′nạ
Dī-ẹ′gō
Dī-lō′lō
Dī-năr′ie
*Dn*ie′ṣtęr
Dŏm′ĭ-nĭ′ca
D'Or (dōr)
Dŏr′dō*gne*′
Drāve
Dreiherrn Spitz (drī′hêrn shpĭtz′)
Drēs′dẹn
Dŭb′lĭn
Dubuque (du-bōok′)
Dü-e′rō
Dū′nä
Dwĭ′nạ
Ē′brō
Ecuador (ĕk-wä-dōʀ′)
Ēdġe′eŭm*be*
Edinburgh (ĕd′ịn-bûr-ruh)
Ĕġ-ẹ-dęs Land
Eg′mont
E′ġўpt
Elbe
El-broōz′
El′lĕs-mēre
El-lïẓe′
En′der-by
England (ĭng′ġland)
E-quā′tọr
E′rïē
Ēr Rī′ăd
Ērts
Esquimaux (ĕs′kĭ-mō)
Euphrates (yụ-frā′tēz)
Eū′rọpe
Eū′rō-pē′ạn
Ev′ẹr-ĕst
Eyre (âr)
Fạlk′lănd
Fā′rōe
Fee′jee
Fĕz′zän′
Fĭn′stęr *Aär*-hôrn
Fjôrd
Flôr′ĭ-dạ
Fō′gō
Fŏn-sẹ′eä
Fōo-chow′
For-mō′sạ
Fôrt Wāyne
Frā′zẹr
Fränçe
Frĭ′ō
Frŏb′ish-ẹr
Fue′gō
Fŭ′sĭ-yä′mä
Gâird′nẹr
Găl′ạ-pā′gọs
Găl′la-tĭn
Găl-lĭ′näs
Găl′vĕs-ton
Gạl′wāy
Găm′bĭ-ạ
Găn′ġēs
Gaʀ′dä
Gä-rōn*ne*′
Găs′eo-nāde′
Ge′dee Tẹ-ġāl′
Gēe-lông′
Gĕn′ẹ-see′
Gē-nē′va
Gĕn′o-ạ
Geôr′gĭ-ạ
Geў′sęrs
*G*ha*u*ts
*G*hĕnt
Ġĭ-bral′tar
Gila (hē′la)
Gĭ-rōnde′
Glās′gō*w*
Gō′bĭ′
Goü′rŏck
Grạ-nä′dä
Grän Säs′sō
Grätz
Greenwich (grĭn′j)
Grin-nell′
Grōss Glōck′nẹr
Guadalajara (gŭä-dä-la-hä′rä)
Guạ′dạ-loüpe′
Gŭä-dä-lü′pe
Guạ′dạl-quïv′ir
Guạ′dï ä′nạ
Gua-na-jua-to (gwä-nä-ʜwä′to)
Gŭär′dạ-fūi′
Guạ′te-mä′la
Guä-vị-ä′rẹ
Guayaquil (gwī-ä-keel′)
Gu*ï*-ä′nạ
Gu*ï*n′ea
Gu*ў*-ăn-dot*te*′
Hāg*ue*
Hăl′ĭ-fax
Hä-mä′dä
Hăng Chow′
Hän′nĭ-bal
Härtz
Hät′tẹr-as
Ha-văn′a
Hăv′re
Hawaii (hä-wī′ee)
Hāy′tĭ
Hĕb′rĭ-dēs
Hĕk′la
Hĕn-lō′pẹn
Hẹr-ät′
Hᴇʀrn′hüt
Him-a-lā′ya
Hïn′dōō Kōōsh
Hō-ăng′ Hō′
Hō′rĕb
Höl′steĭn-bûrg
Hōl′stọn
Höl′yōke
*H*ŏn′dō
Hon-dū′rąs
Hŏng′ Kŏng′
Hō-nō-lü′lü
Hoo͝′săc
Hŏth′ăm
Hoü-sạ-tŏn′ie
Hoūs′ton
Hō′vạ
Huäl-lä′ġa
Hü-e′
Humphreys (hŭm′frēz)
Hŭ′ṛọn
Hў′dẹr-ạ-bäd′
I′dạ-hō
Illimani (eel-yä-mä′nee)
Il-lĭ-nois′
Il-mĕn′
In′dĭ-ăn′a
In′dĭ-an-ăp′ọ-lis
In′dĭ-ạ-nō′lạ
In-drä-pü′rä
In′dŭs
I-ō′ni-ạn
I′o-wạ
Ị′rän′
Ïr-koütsk′
Ïr′rạ-wad′dy
Ïʀ-tўsh′
Ï-säl′cō
Ï′ṣär-än′
Ï-tas′ca
Ïz-täe′çĭ-huätl′
Jalapa (ʜä-lä′pä)
Ja-mäi′ca
Jän Maў′ẹn
Ja-păn′
Jäp′ạ-nēse′
Japura (ʜä-pü′rä)
Jä′va
Jä-vä′rĭ
Jĕs′sō
Joachin (ʜwä-keen′)
Jorullo (ʜo-rōōl′yō)
Juan de Fuca (ʜōō′ăn dā fōō′ca)
Jucar (ʜōō′kär)
Jungfrau (yüng′frow)
Jū-nĭ-ăt′ạ
Jū′rạ
Jurua (ʜōō-rōō′ä)
Jŭt′land
Kebyles (kā-bēlz′)
Kä′lä-hä′rĭ
Kăl′ạ-ma-zōō′
Kä′mä-lōn′dō
Kămt-chät′ka
Ka-na-wha
Kän′chĭn-jïn′ġạ
Kä′rä-kō′rŭm
Käs-bĕk′
Käs-käs′kĭ-ạ
Ka-tä*h*′din
Kē*ar*′särġe
Kẹl-ät′
Kē′nĭ-ạ
Kĕn′nẹ-bĕc′
Ke-wee′na*w*
Kha*r*-tüm′
Kha-dïve′
Kha*n*-gän′
Khï′vä
Kï-äeh′tä
Kïl-ĭ-män′jä-rō′
Kishenau (kish′ẹ-now′)
Kï-ü′sï-ü′
Kïz′il Ïr-mäc′
Klăm′äth
Knox′vil*le*
Kō′nĭgs-bergh
Kōr-dō-fän′
Kŏs-çĭ-ŭs′kō
Kü-bän′
Kŭĕn-lün′
Kü′mọ
Kür
Kü′rïle
Läch′lăn
Lä Crōsse
Lăd′o-gạ
Lạ-drōne′
Lä Gu*aў*′rä
Lä-gü′nä Măd′rẹ
Lăne′ạs-tẹr
Lăn′sing
Lä Päz
Lä Plä′tä
Lăr′ạ-mie
Läs′sä
Läs′sẹn
Lăt-rōbe′
Lĕav′ẹn-worth
Lĕb′ạ-nọn
Lse′ŭ-win
Lcïn′stęr
Leīp′sïe
Lē′nạ
Lē′ön
Lẹ-ve-qūe′
Lī-bē′rĭ-ạ
Li*e*ġe
Lïl*le*
Lï′mä (Peru)
Lï′ma (U. S.)
Lĭş′bọn
Lïs′bûrn*e*
Lĭ*g*ŭs′nẹ
Lla′nō Es-tā-cä′dō
Lla′nos
Loire (lwäʀ)
Lŏm′nĭtz
Lòn′dòn
Lōo Chōo
Lō-pät′kä
Lō′pĕz
Loü′ĭ-şĭ-à′na
Lōw′ell
Lōw′thĕr
Lü′ạ-lä′ba
Lŭck′now′
Lugnaquilla (lŭg′na-kwĭl′ạ)
Lulea (lōō′lē-ō)
Lu-pä′tä
Lŭx′ẹm-bûrg
Lü-zōn′
Mä-cä′o
Măe-kĕn′zi*e*
Măck′ĭ-naw
Măd′ạ-ġăs′ca*r*
Mạ-dēi′rạ
Măd-räs′
Män′rẹ
Mā′lar
Măġ′dạ-lẹn
Măg-dạ-lē-na
Măġ′de-bûrġ
Mạ-ġĕl′lạn
Maggiore (mäd-jō′rā)
Mạ-lăc′ca
Mä-lä-dĕtt′ä
Mä-nä′ġuä
Măn′dẹ-lay
Măn-ĭ-co*ua*′ġạn
Mạ-nïl′ạ
Măn-ĭ-tō′ba
Măn′ïs-tęr
Măn-tchōō′rĭ-ạ
Mantiqueira (măn-te-kā′rä)
Mạ-lay′
Mā-ō′rïş
Mä-rä-ca*ў*′bō
Mä-rĭ-a′tō
Mä-rï′äs
Mä-rit′zä
Mär′mọ-ra
Mär-qūe′sas
Mär-qūe*tte*′
Mär-se*illes*′
Mär′ti-niqūe′
Mäs-cä-ren*e*′
Măt′ạ-ġor′dạ
Măt′a-păn′
Măt′ta-mō′rąs
Măt′tęr-horn
Mauna Kea (maw′nä kā-ä′)
Mauna Loa (mow′nä lō′ä)

Mauritius (maw-rĭsh′ĭ-ŭs)
Maz′at-lan′
Mĕc′eą
Me-dī′ną (Arabia)
Me-dī′ną (U. S.)
Med′ĭ-ter-rā′ne-ąn
Mel′bourne
Memphis (mĕm′fis)
Mĕn-dō-cī′nō
Mĕn-ŏm′o-nee
Mĕntz
Mā-rā′pĭ
Mĕr′rĭ-măc
Mesen (mĕz-ain′)
Mes-sī′nä
Meţā
Mεūse
Mī-ä′kō
Mī-ä′mi
Mĭch′ĭ-gąn
Mĭl′ąn
Mil′ledge-ville
Mille Lăc
Milt-sĭn′
Mĭn′nę-ăp′o-lis
Mĭn′nę-sō′tą
Mĭ′ño
Mĭqū-e-lŏn′
Mis-soŭ′rĭ
Mō-bīle′
Mäg′ą-dōr′
Mō′hawk
Moldau (mōl′dow)
Mo-năd′nock
Mŏn-gō′lĭ-ą
Mŏn-īs′tĭqūe
Mō-nŏn′gą-hē′lą
Mŏn-rō′vĭ-ą
Mŏn-tăn′ą
Mont Blanc
Mŏn′tę-ne′grō
Mon′te Rō′sā
Mon′te Ve-li′nō
Mont Iseran (mōn-tē-zęr-ăn′)
Mont Pĕ-lee′
Mont-pē′lĭ-er
Mont Pĕr′dū
Mont′rę-ąl′
Morawa (mō-rä′vä)
Mō-rē′ą
Moreau (mō-rō′)
Morne Diablotin (mōrn dē-ăb-lō-tăn′)
Mŏs′eōw
Mō-selle′
Mō′zam-bīqūe′
Mü-er′tō
Mulhausen (mūl′how-zęn′)
Mū′nĭch
Mŭr′rŭm bĭd′gee
Mŭr-zŭk′
Mŭs-cät′
Mŭs-kē′gŏn
Mŭs-king′ŭm
Nä′gą-sä′kĭ
Năn′dä Dę′vĭ
Năn-kĭn′
Nantes
Nā′ples
Nä′po
Năr′rą-găn′sĕtt
Năsh′ū-ą
Nä-täl′
Năs′sąu
Năt′ŭ-răl-ĭste′
Nę-brăs′ką
Nĕch′ęz
Nĕdj′ed
Neuse
Nę-vä′dä
New Căl′e-dō′nĭ-ą
New′cas-tle
New′found-land′
New Or′le-ąns
New Zēa′land
N-gä′mĭ
Nĭ-ăg′ą-ra
Nĭc′ą-rä′gŭä
Nĭ-cō′yä
Niē′męn
Nieuweveld (nē-ûv′ā-vĕld′)
Nĭ′gęr
Nĭ-ō-brä′rą
Nĭng Pō
Nĭ-phon′ (-fŏn)
Nĭz′nēi
Nôr′fo/k
Nourse
Nō′vą Scō′ti-ą
Nŏv′gō-rŏd′
Nū′bĭ-ą
Nŭe′çes
Nyăn′zą
Oahu (wäh′hōō)
O′bē
O-chătsk′
Oc-mŭl′gee
O-eō′nee
O′der
O-dĕs′są
Oē′tą
O′kee-chō′bee
O-lym′pĭ-ą
O-lym′pŭs
O-nē′gą
On-tä′rĭ-ō
O-rän′
Or′e-gon
O′rĭ-nō′eō
O′rĭ-zä′bä
Ork′nēy
Or′le-ąns
O-rō′sĭ
O-sä′eä
Os′we-gătch′ie
Os-wē′gō
Ot′ta-wą
O-zärk′
Pą-lĕr′mō
Pal′ĕs-tīne
Pä-mīr′
Păm′lĭ-cō
Păm′pas
Păn′ą-mä′
Păp′ū-ąns
Pä-rä′
Pä-rä-gŭāy′
Par′ą-măr′ĭ-bō
Pä-rä-nä′
Pä-rĭ-nä′
Păr′ĭs
Păr′ma
Păr-nâs′sŭs
Päs-sä′rō
Păt′ą-gō′nĭ-ą
Păt′na
Paumotu (pō-mō′tōō)
Pę′eōs
Pei Ho (pā-hō′)
Pe-ĭ′pŭs
Pē-kĭn′
Pe-lew′
Pę-lĭng′
Pĕm′bĭ-na
Pe-nŏb′scot
Pē-ō′rĭ-ą
Pē′pĭn
Per-dĭ′do
Pēr-pĕt′ū-ą
Persia (pēr′shĭ-ą)
Pę-rū′
Pĕsh-tĭ′gō
Pĕsth
Pĕt-chō′rą
Phĭl′ip-pīne
Pĭ-chĭn′chä
Pĭl′eō-mą′ō
Pĭ′lŏt Knŏb
Pĭn′çŏn
Pĭn′dŭs
Pĭ-ne′gä
Plătte
Plў′mouth
Pointe des Ecrins (pwănt-dā zā krăn′)
Polynesia (pŏl-ĭ-nee′shĭ-ą)
Pō-pō-căt′ą-pētl′
Port au Prince (pōrt ō prĭnss)
Pōr′to Rĭ′cō
Pōrt′u-gal
Po-tō′mąc
Poughkeepsie (pō-kĭp′sĭ)
Prāgue
Prāi′rie dų Çhïen
Prussia (prŭsh′ĭ-ą)
Pruth
Pŭĕb′lä
Pŭĕr′co
Pū′get
Pü′rŭs
Pü-tü-maў′o
Puy de Dome (pwē dęh dōm)
Pŷr′ę-nees
Quito (kē′to)
Racine (ras-seen′)
Rä′döck
Rāi′nĭer
Rą′leigh
Rä′lĭck
Răn-gōōn′
Rĕad′ing
Rę-çĭ′fę
Rēs-tĭ-goŭ-çhę′
Rę-ū-nĭ-on′
Rę′yēs
Reykjavik (rĭ′kĭ-ą-vĭk)
Rhĕtt
Rhōne
Rhōd′ŏpe
Rĭ-ăd′
Rĭ′çhę-lieŭ′
Rĭ′gą
Rĭ′o dę lą Plä′tä
Rĭ′o dę läs Bäl′zäs
Rĭ′o Grănde′
Rĭ′o Grän′de de Săn-tĭ-ä′gō
Rĭ′o Ją-neĭ′ro
Rĭ′o Ne′gro
Ro′ą-nōke′
Rŏch′ĕs-tęr
Rō-mā′nĭ-ą
Roü′ęn
Russia (rŭsh′ĭ-ą)
Są-bīne′
Sā′ble
Są′eō
Sä′eo-nūs′eō
Săg′ĭ-naw
Säg′ue-nāy′
Sä-hä′mä
Są-hä′rą
Saī-gŏn′
Saī′mä
Sä-kä′rĭ-ą
Sä-lä′po
Săl′m'on
Säl′ō-mon
Sä-mō′a
Săn An-tō′nĭ-o
Săn Dō-mĭn′gō
Săn Eū-ġē′nĭ-ą
Săn Frăn-çĭs′eō
Săn Joachin (san ho′ä-keen′)
Săn Jose (san ho-zā′)
Săn Juan (san hoō-ăn′)
Săn Lū′is
Săn Mä-rĭ′nō
Săn Miguel (san mē-ġhĕl′)
Săn-năn′
Săn Pe′dro
San Raphael (sān rä′fā-el)
Săn Säl-vä-dōr′
Săn′tä Cä′tä-lĭ′nä
Săn′tä Fe
Săn-tee′
Săn′tĭ-ä′gō
Săr′ą-gōs′są
Sä-rä-wäk′
Sar-dĭn′ĭ-ą
Săs-kătch′ą-wąn
Sąu-cĕd′o
Sąv-ăn′nąh
Scąw′fell
Sçhär Dägh
Sehoō′dĭe
Sçhrĕck′horn
Sçĭ-ō′tō
Scŏt′land
Seū-tä′rĭ
Sē-bā′gō
Seine
Sęl′väs
Sĕn′ę-gąl′
Se-rĕth′
Sēr′vĭ-ą
Sĕv′ille
Seychelle (sā′shĕl′)
Shäh
Shăng Haī
Shăn′non
Shăs′tä
Schĕldt
Shĕn′ăn-dō′ąh
Sheў-ĕnne′
Shĭl′kä
Shĭ′răz
Sī-ăm′
Sī-bē′rĭ-ą
Sĭç′ĭ-lў
Sĭ′drä
Sĭ-er′rä
Sĭ-kōke′
Sĭ′năi
Sĭn-gäl′läng
Sĭn′gą-pōre′
Sioūx
Sĭt′ką
Skăġ′ġer Răck
Skĕl′lĕf-te-a′ (ō)
Skĭd′daw
Skō-mĕ′kän
Smўr′na
Snęe-hät′ten
Sō-bät′
Sō-nō′rä
Sōōn-gä′rĭ-ä
So-rä′tä
Sou-dän′
Soų′frĭ-ere′
Spĭtz′bęrġ-ęn
Spĭtz′kōp
St. Ą′gŭs-tīne
St. Clāir
St. Croix (sęnt croy)
St. Ē-lī′ăs
St. Ēt-ĭ-enne′
Stet-tĭn′
St. Hę-lē′na
St. Lăw′rĕnçe
St. Loų′ĭs
St. Mā-rie′
St. Maurice (son mō-reess′)
Stŏck′hŏlm
Stōke
St. Pierre
Străs′bourg
St. Rōqūe
Stūtt′gärt
St. Vĭn′çent
Sū′ereş
Sū′dē-tēs
Sų′ez
Sų-ĭ′sųn
Sų-leĭ-mān′
Sų-lĭ-tĕl′mą
Sų-mā′trä
Sŭm-bą′wą
Sŭm′bŭrg
Sŭs′que-hăn′na
Su-wą′nee
Sўd′ney
Syr (sēr)
Sўr′ą-eūse
Sўr′ĭ-ą
Tā-brĭş′
Tā-eŏn′ĭe
Tā′gŭs
Tą-hōe′
Tăl′lą-hăs′see
Tăl′lą-pōō′są
Täm-pĭ′eō
Tä-nä-nä-rĭ′vo
Tăn-găn-yĭ′kä
Tăng Chow
Tän′ton
Tapajos (tä-pä′zhōs)
Tä-rän-to
Tä′rĭm
Tăş-mā′nĭ-ą
Tä′trä
Tąu′rŭs
Tę′büş
Tę-hę-rän′
Tä-huän′te-pee
Tĕn′er-ĭf′fe′
Te-rĕk′
Terre Haute (tĕr-rę hōt′)
Tē′ton
Thames (tēmz)
Theïss
The-re′sĭ-en′städt
Thĭ-ăn′ Shän
Thĭb′ĕt
Thür
Tĭ-änt′sĭn
Tĭ′bęr
Tĭ-er′rä dĕl Fuego (fwā′go)
Tĭf′lĭş
Tĭ′grĭs
Tĭm-bŭk′tü
Tĭ-mōōr′
Tĭt-ĭ-eä′eä
Tō-bōlsk′
To-eän-tĭns′
Tō-kĭ′ō
To-lē′dō
To-lŭ′eä
Tōn-gä-rĭ′rō
Tō-pē′ką
Tor′nē-a (-o)
Tō-rŏn′tō
Tŏr′rĕs
Tŏr′rĕns
Toų-lŏn′
Toų-louse′
Tours
Tråns-vääl′
Trä-vēr′se′
Trĕb′ĭ-zond′
Trĕn′ton
Trĭ-ĕste′
Trĭn′eo-mą-lī′
Trĭn′ĭ-dăd′
Trĭp′o-lĭ
Tsad (chad)
Tuaregs (tōō-ä-rēks′)
Tųe-gōn′
Tün′drą
Tür-gouş′kä
Tū′nĭs
Tü-pür-gä′tō
Tū′rĭn
Tür′kĭs-tän′
Ū-eaў-ä′le
Uintah (win′tą)
Ū-le′a (-o)
Ūl-lo′ä
Ū-mē′a (-o)
Ū-nä′kä
Ūn′eŏm-päh′gre
Ūn-gä′vä
Ū-pĕr′nĭ-vĭk
Ū′rąl
Ū′rü-guāy
Ū-sū-ma-sĭn′tą
Ū′täh
Ū′tĭ-eą
Valencia (vą-lĕn′shĭ-ą)
Väl-pä-raī′sō
Van-eou′vęr
Vär-där′
Vĕn′ę-zū-ē′lą
Vĕn′içe
Vĕn′tū-ä′rę
Ve′rä Cruz′
Vērde
Vermejo (vĕr-mā′ho)
Vęr-sāil′ęş
Ve-su′vĭ-us
Vĭ-ę′no
Vi-ĕn′na (Austria)
Vĭ-ēn′na (United States)
Vindh′yä
Vĭst′ū-la
Vŏl′ga
Wą′băsh
Wā′ġęr
Wąh-sätch′
Wäl′den
Wąl′kęr
Wąr′saw
Wąsh′ĭ-ta
Wą′tęr-ēē′
Wę′nęr
Wę′sęr
Wĕt′ter
Tours
Whĭt′ney
Wilkes′bär-rę
Wil-lä′mĕtte
Wĭn′nĭ-pēġ
Winnipiseogee (wĭn′nį-pis-sōk′kĭ)
Wĭs-eŏn′sĭn
Wŏl′łas-ton
Worcester (wōos′ter)
Wŏtch′ish
Wräng′ęl
Wräth
Wûr′tem-burg
Wў-ō′ming
Xingu (shēn-gōō′)
Yăm′päh
Yăng′tse-kĭ-ăn
Yănk′ton
Yä-qūī′
Yar-känd′
Yā-zōō′
Yĕn-ĭ-se′ĭ
Yō′kä-hä′mä
Yŏn′kęrs
Yų′ça-tăn′
Yų′kon
Yün-lĭng′
Zäe′ą-te′ças
Zambesia (zăm-bē′zhĭ-ą)
Zăm-bēze′
Zanguebar (zăng′ġe-bär′)
Zēa′land

INDIANA.



The New State House, at Indianapolis.

DESCRIPTION.

(*For Map Questions, see page 3.*)

EXTENT AND SURFACE.

1. **Indiana** is situated mostly in the great Mississippi Valley. Its average width is 150 miles; its length, 230 miles; its **area**, 36,350 square miles.

2. **Surface.**—The extreme northern part is quite level, and is but little elevated above Lake Michigan; the remainder of the state is a gently sloping plain into which the rivers have worn wide valleys, thus giving the country an undulating surface.

The lowest part of the state is in the south-western corner, where the elevation is only 300 feet above the sea-level; the highest portions, between the head waters of the White and the White Water, are about 900 feet above the sea-level. Weed Patch Hill, in Brown County (1,173 ft.), is the highest point.

The "river hills," or the margins of the valley of the Ohio, rise from 200 to 500 feet above the bottom lands. The valleys of the other streams are not so wide as the Ohio valley, and the river hills, or uplands, are rarely more than 200 feet above the bottom lands.

A range of low hills enters the state from Kentucky, in Floyd County, trends first north-west, and then along the boundary between Clark and Washington counties. This range, called "The Knobs," is from half a mile to a mile in width and about 500 feet high.

RIVERS AND LAKES.

3. **Rivers.**—The north-eastern and the extreme northern portions of the state are drained by affluents of the Great Lakes, and belong to the St. Lawrence Valley. Only one ninth of Indiana is drained into the St. Lawrence; the remainder is drained by affluents of the Mississippi

4. The Wabash drains nearly three fourths of the area of the state to the Ohio River. It rises in Ohio, and, crossing Indiana, forms the western boundary for more than 110 miles. In high water it has been navigated to La Fayette.

White River is the principal tributary to the Wabash. The Kankakee drains the north-western part to the Illinois River.

5. The Ohio flows along the southern boundary for 370 miles, draining through small tributaries about one seventh of the state.

The bottom lands of the Ohio are from two to ten miles wide, and the river is navigable throughout its entire course. At the rapids known as the "Falls of the Ohio," between Jeffersonville and New Albany, the river descends 22 feet in two miles. Boats pass over these rapids during high water. A canal built on the Kentucky side of the river, admits the passage of steamers in all stages of water.

6. **Lakes.**—Lake Michigan forms a part of the northern boundary of Indiana.

There are many very beautiful lakes in the northern part of the state; all are shallow, and are surrounded by large deposits of marl. English Lake, an expansion of the Kankakee is the largest lake wholly within the state.

CLIMATE AND SOIL.

7. The **climate** of Indiana is mild and healthful; but sudden and violent changes of temperature are frequent. The mean temperature is 54°. The annual rain-fall is about 42 inches.

The average temperature for winter is about 34° Fahrenheit; for summer, 70°. The difference between the temperature of the northern and southern portions is only 8°.

The rain-fall is ample and well distributed through the year. In the southern part of the state, the total average annual fall of rain is 48 inches; in the northern part, 36 inches.

8. The **soil** is very fertile, consisting of a rich, dark loam in the river bottoms, but composed more largely of clay on the uplands. In the northern part the soil is more sandy.

QUESTIONS.—1. Where is Indiana? What are its dimensions and area?—2. Describe the surface.—3. To what systems do the streams belong?—4. What river drains most of the state? Name its chief tributary. What river in the north-west?—5. What is said of the Ohio?—6. Of the lakes?—7. Describe the climate.—8. What is the character of the soil?


MAP OF
INDIANA
by
A. von Steinwehr, A. M.
Scales:
Statute Miles.
10 5 0 10 20
Natural Size, as 1 to 1,591,000
or
26 miles to the Inch.
1.87.
88
87
86
85
West of Greenwich.
41
40
39
38
9
West of Washington.
L. MICHIGAN
582 ft. above the Sea Level
CHICAGO
MICHIGAN
ILLINOIS
OHIO
INDIANA
KENTUCKY
LAKE
PORTER
LA PORTE
ST. JOSEPH
ELKHART
LA GRANGE
STEUBEN
DE KALB
NOBLE
KOSCIUSKO
WHITLEY
ALLEN
JASPER
PULASKI
FULTON
MARSHALL
NEWTON
BENTON
WARREN
TIPPECANOE
CASS
MIAMI
WABASH
HUNTINGTON
ADAMS
WELLS
CARROLL
HOWARD
GRANT
BLACKFORD
JAY
TIPTON
CLINTON
DELAWARE
RANDOLPH
FOUNTAIN
WARREN
MONTGOMERY
BOONE
HAMILTON
MADISON
HENRY
WAYNE
HANCOCK
HENDRICKS
MARION
PARKE
PUTNAM
RUSH
FAYETTE
UNION
SHELBY
JOHNSON
MORGAN
VIGO
CLAY
OWEN
FRANKLIN
DECATUR
SULLIVAN
GREENE
MONROE
BROWN
BARTHOLOMEW
RIPLEY
DEARBORN
JACKSON
LAWRENCE
MARTIN
JEFFERSON
SWITZERLAND
DAVIESS
KNOX
SCOTT
WASHINGTON
ORANGE
CLARKE
PIKE
DUBOIS
GIBSON
CRAWFORD
FLOYD
HARRISON
WARRICK
PERRY
POSEY
SPENCER
Lake Michigan
New Buffalo
Michigan City
New Carlisle
South Bend
Mishawaka
Elkhart
Goshen
White Pigeon
Bristol
Angola
Fremont
Pleasant Lake
Hamilton
Wolcottville
Rome City
Kendallville
Bryan
Waterloo
Auburn
Garrett
Chesterton
La Porte
Westville
Wellsboro
Lakeville
Bremen
Wakarusa
Ligonier
Hobart
Wheeler
Valparaiso
Wanatah
Crown Point
Hebron
Lowell
Hanlet
Milford
Leesburg
Albion
Garrett
Auburn
Butler
Waterloo
Spencerville
Etna Green
Bourbon
Plymouth
Warsaw
Pierceton
Churubusco
Huntertown
Leo
Cedarville
Antwerp
Paulding
Arcola
Fort Wayne
New Haven
Monroeville
Maples
Manchester
Roanoke
Huntington
Sheldon
Van Wert
Decatur
Enterprise
Morocco
Rensselaer
Francesville
Winamac
Medaryaville
Fair Oaks
Rochester
Kewanna
Argos
Marmont
Mentone
Claypool
Columbia City
Arcola
Arcadia
Cicero
Noblesville
Anderson
Eaton
Muncie
Selma
Farmland
Winchester
Spartanburg
Greenville
Union City
Fairview
Ridgeville
Randolph
Portland
Liber
Dunkirk
Red Key
Camden
New Corydon
China
Marion
Montpelier
Jonesborough
Fairmount
Upland
Hartford City
Gilman
Watseka
Sheldon
Kentland
Goodland
Remington
Wolcott
Reynolds
Brookston
Delphi
Galveston
Logansport
Peru
Rochester
Rockfield
Camden
Pittsburgh
Burlington
Idaville
Burnettsville
Monticello
Chalmers
Fowler
Oxford
Wempleton
Battle Ground
Lafayette
Rossville
Dayton
Stockwell
Jefferson
Michigantown
Frankfort
Tipton
Windfall
Sharpsville
Kokomo
Russiaville
Buckingham
New London
Bunker Hill
Cassville
Xenia
Mier
Converse
Miami
Wabash
Denver
Rich Valley
Lagro
Roann
Mexico
Amboy
Markle
Ossian
Murray
Mt Etna
La Fontaine
Warren
Bluffton
Vera Cruz
Monroe
Berne
Geneva
Wagoner
Paxton
Hoopeston
Boswell
Montmorenci
Transitville
Buckingham
Oakford
Jonesborough
Fairmount
Upland
Hartford City
Dunkirk
Red Key
Eaton
Liber
Portland
Kentland
Alvin
Williamsport
Attica
Rob Roy
Romney
Linden
Colfax
Kirklin
Buena Vista
Arcadia
Cicero
Elwood
Alexandria
Pendleton
Fortville
Greenfield
Indianapolis
Danville
Plainfield
Bellville
Clayton
Bainbridge
Bellmore
Rockville
Montezuma
Parke
Putnam
Greencastle
Putnamville
Stilesville
Bridgeton
Roseville
Clinton
Paris
Kansas
Terre Haute
Prairieton
Lockport
Hartford
Middletown
Farmersburg
Shelburn
Sullivan
Merom
Robinson
Carlisle
Lyons
Switz City
Bloomfield
Patricksburg
Spencer
Middleberry
Gosport
Owensburg
Newberry
Worthington
Freedom
Ellettsville
Unionville
Bloomington
Nashville
Georgetown
Stinesville
Harrodsburg
Smithville
Elkinsville
New Bellsville
Waynesville
Jonesville
Queensville
Taylorsville
Hartsville
Columbus
Westport
Sardinia
Elizabethtown
Napoleon
Milhousen
Smyrna
Spades
Batesville
Harrison
Oldenburg
New Point
Greensburg
Adams
Clarksburg
Waldron
St Paul
Milroy
Shelbyville
Fairland
Manilla
Rushville
Connersville
Alquina
Columbia
Everton
College Corner
Liberty
Brownsville
Laurel
Brookville
Hamilton
Lawrenceburg
Aurora
Dillsborough
Hartford
Florence
Rising Sun
Aberdeen
Enterprise
Bennington
Barkwrights
Patriot
Madison
Brooksburg
Vernon
New Marion
Seymour
Cortland
Dupont
Austin
Holman
Kent
Hanover
Milton
Carrollton
Scottsburg
Vienna
Lexington
Salem
Campbellsburg
Saltillo
Little York
Medora
Brownstown
Vallonia
Bedford
Springville
Clear Spring
Mitchell
West Salem
Shoals
Orleans
Orangeville
Paoli
Hardinsburg
Peking
Henryville
Memphis
Borden
Charlestown
Utica
Corydon
Lanesville
Albany
Greenville
Galena
Marengo
Milltown
Grantsburg
Birds Eye
Bretzville
Huntingburg
Ferdinand
Jasper
Ireland
Petersburg
Otwell
Hazleton
Patoka
Princeton
Oakland
Pikeville
Ingleton
Pleasantville
Holland
Taylorville
Lynnville
St. Meinrad
Dale
Gentryville
Fulda
Boonville
Centreville
Newtonville
Leopold
Elizabeth
Mauckport
Grand View
Rockport
Hawesville
Cannelton
Romeo
Brandenburgh
Owensville
Fort Branch
Grayville
Mt. Carmel
Albion
Haubstadt
New Harmony
Poseyville
Evansville
Newburgh
Mt. Vernon
Henderson
Ohio R.
Wabash R.
White R.
Patoka R.
Blue R.
Kentucky R.
Tennessee R.
Cumberland R.
Green R.
Salt Creek
Fall Creek
West Fork
East Fork
Whitewater R.
Kankakee R.
Illinois R.
Vermilion R.
Big Vermilion R.
Little Vermilion R.
Sugar Creek
Raccoon Creek
Big Walnut Creek
Eel R.
Mississinewa R.
Deer Creek
Tippecanoe R.
Yellow R.
Kankakee R.
Iroquois R.
Louisville
Jeffersonville
New Albany
Floyds Knobs
Corydon
Fort Fulton
Ohio R.
Indianapolis
Fair Ground
Haughville
West Indianapolis
Belt R.R.
C.H.&I.R.R.
C.C.C.&St.L.R.
I.&St.L.R.R.
L.N.A.&C.R.R.
St.L.V.&T.H.R.R.
I.&C.R.R.
I.&V.R.R.
MAP OF
INDIANAPOLIS
H. Chandler, Engraver, Buffalo.

MAP QUESTIONS.

What state and what lake bound Indiana on the north?—What state bounds it on the east?—On the south?—On the west?—What river separates Indiana from Kentucky?

What is the surface of Indiana, as shown by the map?—What part of the state is most broken?—What part is swampy?

What river flows into the Ohio at the south-east corner of the state?—What river flows into the Miami?—What tributary of the Ohio forms part of the western boundary of Indiana?—Name the streams that flow into the Ohio between the Miami and the Wabash.—Where does the Wabash rise?—In what direction does it flow?—Name two of its northern tributaries.—Its chief tributary from the east.—What two forks form the White River?—In what counties do these forks rise?—What river in the north-western part of the state?—What river south of the Kankakee?—What river in the extreme northern part?—What river drains the north-eastern part of the state?—What two rivers form the Maumee?—Where do they unite?—What portion of Indiana contains numerous small lakes?—What lake south-east from Lake Michigan?

What is the capital of Indiana?—In what county is Indianapolis situated?—On what river?—Name the principal towns on the Ohio.—On the East Fork of the White.—On the West Fork.—On the Wabash.—On the St. Joseph.—What town on Lake Michigan?—What is the county seat of Wayne County?—Of Vigo?—Of Vanderburgh?—Of Cass?—Of Tippecanoe?—Of Dearborn?—Of Elkhart?—Of Madison?

Local Geography.—Locate and bound the county in which you live.—Describe its surface.—What streams flow through it?—What is the county seat?—Where located?—Name the other towns in the county.

NOTE.—Instruction in Local Geography should be given orally, and each pupil should be taught to map correctly and intelligently his own city, township, and county. The ideas may be developed in the following order:

1. **Form,** as a square; length of one side; position; outline.
2. **Land Surface,** as a plain; plateau; hill; valley.
3. **Waters,** as a brook; river; marsh; pond; lake.
4. **Climate,** its chief elements,—wind; temperature; moisture.
5. **Soil,** its constituents; its origin.
6. **Minerals,** as stones,—sandstone and limestone; coal; iron; salt.
7. **Vegetation,** *natural*,—as trees, shrubs, and herbs; *cultivated*,—crops.
8. **Animals,** wild and domestic.
9. **Man,** his occupations, productions, laws, and system of education.
10. **Cities and Towns,** or the associations of men.

MINERALS AND VEGETATION.

9. There are but five states in the Union which produce more **coal** than Indiana. The coal-fields lie in the south-western half of the state.

All the coal of Indiana is bituminous, and is found in thick seams that are easily worked.

10. Excellent limestone for building is quarried in the central and southern parts of the state. But four states of the Union surpass Indiana in the amount quarried. Sandstone is found in the east, and kaolin in Lawrence County. Iron ore is found in Martin, Greene, and Lawrence counties; and bog iron ore, in the northern parts of the state.

11. Grassy **prairies** occur in the northern and western parts of the state. Some of these were formerly swampy.

12. In the south-eastern part of the state there are some **forests** of valuable timber.

The most common forest trees are black walnut, oak, ash, maple, elm, white walnut, poplar, hickory, beech, and sycamore. There are but few native evergreen trees. Fruit trees, such as the apple, the pear, and the peach, are cultivated with great success. Grapes are also raised in all parts of Indiana.

ANIMALS.

13. Deer, wild cats, and beavers are occasionally seen in the sparsely settled parts; but the smaller **wild animals,** such as foxes, raccoons, opossums, rabbits, etc., are still quite abundant.

The larger game birds have become scarce; but ducks, pigeons, snipe, quails, etc., are to be found in considerable numbers in their season. Singing birds are numerous.

Pike, perch, bass, suckers, cat-fish, buffalo-fish, etc., are found in the southern streams; in the northern lakes and rivers are bass, perch, lake herrings, white-fish, pickerel, etc.

14. Immense numbers of **domestic animals** are reared, particularly swine, cattle, sheep, and horses.

HISTORY AND INHABITANTS.

15. At the time of its discovery by Europeans, Indiana was inhabited by **Indians** of the Algonquin family.

The Miamis, or Twightwees, lived about the present site of Fort Wayne; the Weas dwelt farther west, in the neighborhood of La Fayette; the Shockeys and the Piankeshaws lived south and west of the Weas.

16. Indiana was **first visited** by a Frenchman, named La Salle, who descended the Ohio to the falls in 1670. Before the close of 1719, the French had settlements at Vincennes, at Post Miami, on the site of Fort Wayne, and at Ouiatenon, near the site of La Fayette. Vincennes is the oldest permanent white settlement in the state, since Post Miami and Ouiatenon were afterward destroyed.

In 1763, the French possessions east of the Mississippi were surrendered to the British. In 1778, an expedition, authorized by Virginia, and commanded by Colonel George Rogers Clark, entered the territory and compelled its inhabitants to swear allegiance to the colony of Virginia.

The Territory North-west of the Ohio, of which Indiana formed a part, was organized in 1787.

Eight years were spent in struggles with the Indians, until, in 1795, General Anthony Wayne effected a treaty with them at Greenville, Ohio, which opened the land to settlers.

In 1800, the Territory of Indiana was organized. It embraced all the North-west Territory except Ohio. The territorial capital was at Vincennes until 1813, when it was removed to Corydon.

In 1811, Tecumseh and his brother, the Prophet, induced several of the western tribes to join with the Shawnees in resisting the advance of the white settlers. Gov. Harrison defeated the Prophet in a battle fought at Tippecanoe, north of La Fayette, November 7, 1811. This virtually broke up the confederacy, though several battles were fought afterwards.

17. In 1816, Indiana was admitted into the Union as a state, with its present boundaries. The seat of government was removed from Corydon to Indianapolis in 1825.

In 1880, the **population** of Indiana was 1,978,301. In 1800, it ranked as the 20th state in the Union in respect to population. Since 1860 it has ranked as the 6th state.

Less than one tenth of the population are of foreign birth, and of these over one half are Germans. A few Indians still remain in the state.

19. The average **density of population** is about 55 persons to the square mile. A wide belt through the central portion has the densest population.

QUESTIONS.—9. How does Indiana rank as a coal-producing state? Where are the coal-fields?—10. What other minerals are found, and where?—11. What is the nature of vegetation in the north and west?—12. In the south-east?—13. What is said of the wild animals?—14. Of domestic animals?—15. Who inhabited Indiana when Europeans first came to it?—16. What white man first visited Indiana? What was the first permanent settlement?—17. When was Indiana admitted into the Union?—What was the population in 1880? What is the rank of the state?—18. What is the density of population?

OCCUPATIONS AND PRODUCTIONS.

19. **Agriculture** is the principal occupation, and engages the attention of more than half of the working population of the state.

Fourteen millions of acres are now in improved farms; about six and one half millions of acres are woodland; less than a million of acres are unimproved.

The following table shows the annual amount or value of the leading agricultural products:

Corn,	115,500,000 bushels.	Horses,	581,000
Wheat,	47,000,000 "	Cattle,	1,350,000
Oats,	15,600,000 "	Sheep,	1,100,000
Potatoes,	6,500,000 "	Swine,	3,200,000
Tobacco,	8,900,000 lbs.	Wool,	6,168,000 lbs.
Hay,	1,400,000 tons.	Butter and Cheese,	38,000,000 lbs.
Orchard products,	$2,757,000	Milk,	6,725,000 gals.

20. **Manufacturing.**—Flour and lumber milling, slaughtering and meat-packing, and the producing of machinery, railroad-cars, iron and steel, agricultural implements, carriages and wagons, and furniture are the most important branches of manufacture.

In 1880, the capital employed in manufacturing was $65,750,000, and the total value of the products was $148,000,000.

21. **Commerce.**—The Ohio River, Lake Michigan, canals, and a net-work of railroads furnish abundant facilities for commerce.

Most of the railroads connecting the eastern cities with the West and Northwest cross the state. Indianapolis, Fort Wayne, Terre Haute, Logansport, La Fayette, Crawfordsville, Vincennes, Richmond, Muncie, Cambridge City, Anderson, and Kokomo are the chief railroad centers. About 5,600 miles of railway are in operation in Indiana.

The canals are now little used, except for their water-power. The Wabash and Erie is the most important of these. It extends from Evansville to Terre Haute, and, following the general course of the Wabash, connects at Fort Wayne with the section leading down the Maumee.

22. **Mining.**—The coal-measures cover an area of about 6,500 square miles, and have an aggregate thickness of 31 feet of coal. Nearly 1½ million tons were mined in 1880. The products of the quarries are largely used in Indiana and other states for building purposes.



Normal School, at Terre Haute.

GOVERNMENT.

23. Like other states of the Union, Indiana has a **republican** form of government.

The Executive authority of the state is vested in a Governor. A Lieutenant-governor is also chosen, who is President of the Senate. These hold their office four years. The state officers are a Secretary of State, a Treasurer, an Auditor, an Attorney-general, and a Superintendent of Public Instruction, who are elected for a term of two years.

The Legislative powers are vested in a General Assembly, consisting of a Senate and a House of Representatives. The Senate consists of 50 members, elected for a term of four years; the House, of 100 members, elected for a term of two years. The sessions of the General Assembly begin in January of the years with odd numbers.

The Judicial powers are vested in a Supreme Court, consisting of five judges, and in 43 Circuit Courts, having one judge each. These are elected for terms of six years. There are also Superior Courts in several of the chief cities, and minor Courts throughout the state having less jurisdiction.

Indiana has two Senators and thirteen Representatives in Congress.

The state is divided into 92 counties, with an average area of 395 square miles each. The counties are subdivided into Civil townships, with reference to the convenience of the residents.

The county officers are a Clerk of the Circuit Court, an Auditor, and a Recorder, elected for four years; a Treasurer, a Sheriff, a Coroner, a Surveyor, and Commissioners, elected for two years; and a County Superintendent of Public Schools, appointed for two years.

The state is divided into Congressional townships, excepting in certain grants in Clark, Knox, and the adjoining counties, in several Indian Reservations, and in the grant to the Michigan Road north from Logansport. In a small portion of the south-eastern part of the state, the townships are numbered in *ranges west* from the 1st Principal Meridian, the eastern boundary of the state, and in *townships north* from the Ohio. In the rest of the state the townships are numbered in *ranges east and west* from the 2nd Principal Meridian, a line running north from a point two miles below the mouth of Little Blue River, and in *townships north and south* from a parallel intersecting this meridian in Orange County.

EDUCATION.

24. Provision is made by law for the free education of every child.

The school buildings in each city and county seat are usually among the finest structures, and would attract attention in any locality.

Higher education may be had free of charge at three institutions:

(1) The *State University*, located at Bloomington, including general and classical courses; (2) *Purdue University*, at La Fayette, mainly industrial; (3) The *State Normal School*, at Terre Haute, established for the education of teachers.

Besides these state institutions, there are many other institutions of learning, supported by private or denominational funds; also state schools for the Blind and for Deaf-mutes, at Indianapolis, and a Soldiers' Orphans' Home, at Knightstown.

QUESTIONS.—19. What is the leading occupation?—20. Name the principal branches of manufacture.—21. What is said of commerce?—22. Of mining?—23. Describe the government.—24. What is said of educational facilities?

CITIES AND TOWNS.

25. **Indianapolis,** the capital of the state, is such an extensive railroad center that it has grown to be one of the largest cities in the United States not situated on navigable waters. In 1880, its population was more than 75,000. It has a vast jobbing trade in every kind of merchandise, an immense traffic in grain, flour, and pork, and extensive manufactories. Its public school system is excellent. The court-house is the finest edifice in the state. The several state asylums are creditable buildings. The new capitol, in process of construction, will be one of the best in the Union. The Butler University is located at Irvington, a suburb of Indianapolis.

26. *Evansville* (29,280) is the second city in size, and is noted



An Indiana Farm.

for its beauty, wealth, and enterprise, and for the excellence of its schools. It has extensive commercial interests and numerous manufactories of iron, cotton, tobacco, and other articles. The trade in coal is very great.

27. *Fort Wayne* (26,880) is the third city. Its commercial interests are great; its educational advantages, superior; and its manufactures, numerous and important. Concordia College, Fort Wayne College, and a seminary for young ladies, under the care of the Sisters of Providence, are located here.

28. *Terre Haute* (26,042) is the fourth city. It has an extensive wholesale trade and large manufacturing establishments. Iron and nails are among its leading manufactures. The public schools of the city are well conducted. It is the seat of the State Normal School and a School of Industrial Sciences.

29. *New Albany* (16,423), the fifth city, manufactures plate-glass extensively, and has iron works and cotton factories. Its trade is important. The schools are excellent, and it is the seat of De Pauw College and St. Mary's Academy.

30. *La Fayette* (14,860) is the sixth city, and is noted for its beauty and the wealth of its inhabitants. Purdue University is situated one mile west from the Wabash River.

31. *South Bend* (13,280) is the seventh city. It has a fine water-power, and contains the largest wagon manufactory in the world. Sewing-machines, flour, furniture, farm machinery, and paper are also manufactured. Notre Dame University and St. Mary's Academy are situated near the city.

32. *Richmond* (12,742), the eighth city, manufactures agricultural implements, machinery, and furniture, and has an extensive trade. Earlham College is near the city. The public schools are ably managed.

33. *Logansport* (11,198), the ninth city, has a large and increasing trade, and manufactures lime, flour, machinery, hubs, spokes, etc. Several railroads have repair shops here. Much interest is taken in public education. It is the seat of Smithson College.

34. *Jeffersonville* (9,357) contains extensive car-shops and steamboat yards, a United States Military Depot, and the State Prison South. There is here a fine bridge across the Ohio.

35. *Vincennes* (7,680) is a remarkably well-built city. The public buildings and other edifices are very fine structures. The public schools are excellent. It is the seat of Vincennes University.

36. *Michigan City* (7,366) is the only lake port in Indiana, and contains the State Prison North.

37. *Madison*, county seat of Jefferson County, manufactures flour, starch, and paper, and builds steam-boats. Hanover College is situated six miles distant.

38. *Elkhart* (6,953) has the best water-power in the state, and manufactures paper, flour, starch, furniture, sash and blinds, etc.

39. *La Porte*, the county seat of La Porte County, has extensive car-shops and woolen mills.

40. *Peru*, the county seat of Miami County, has manufactories of woolen goods, furniture, sewing-machine cases, lime, etc.

41. *Crawfordsville* contains a very handsome court-house and one of the finest school buildings in the state. It is the seat of Wabash College.

42. *Muncie*, county seat of Delaware County, is an important business and manufacturing center.

43. *Columbus*, county seat of Bartholomew County, is a thriving commercial city.

44. *Lawrenceburgh*, the county seat of Dearborn County, con-

tains a magnificent court-house, and manufactures furniture, cigars, etc.

45. *Valparaiso* is the seat of the Northern Indiana Normal School, and has some manufactories.

46. *Aurora* (4,435), in Dearborn County, is a thriving manufacturing and commercial town. The leading manufactures are machinery, malt and distilled liquors, nails, etc.

47. *Washington* is a thriving town in a fertile district, and is largely engaged in coal-mining.

48. *Seymour* (4,250) is an important railroad point and the chief commercial town of Jackson County.

49. *Anderson* is a thriving business town. Remarkable earthworks are found near it.

50. *Goshen*, on the Elkhart River, has a good water-power and many manufactories.

51. *Kokomo* is an important railroad center, and manufactures furniture, sash, doors, etc.

52. *Huntington* has manufactories of lime, staves, spokes, etc.

53. *Wabash* is engaged in the manufacture of woolen goods, oil, carriages, furniture, and plows.

54. *Shelbyville*, county seat of Shelby County, is a brisk business city, and has fine public improvements.

55. *Mount Vernon* is a flourishing town on the Ohio River.

56. *Greencastle* is an important railroad center, has some manufactories, and is the seat of DePauw University.

57. *Brazil* is noted for its coal mines and iron furnaces.

58. *Connersville* has excellent schools and manufactories of rotary blowers, furniture, flour, and woolen goods.

59. *Marion* is an important railroad town, and ships a great deal of lumber.

60. *Greensburg* contains fine public buildings. It has some manufactories and extensive quarries.

61. *Warsaw* has a fine situation near the Tippecanoe River.

62. *Franklin* has good railroad facilities, and is the seat of Franklin College.

63. *Mishawaka*, *Union City*, *Kendallville*, *Cambridge City*, *Attica*, *Tell City*, and *Ligonier* have each over 2,000 inhabitants.

QUESTIONS.—25. Describe Indianapolis.—26. Evansville.—27. Fort Wayne.—28. Terre Haute.—29. New Albany.—30. La Fayette.—31. South Bend.—32. Richmond.—33. Logansport.—34. Jeffersonville.—35. Vincennes. Ten other leading cities.

COUNTIES AND COUNTY SEATS.

COUNTIES.	POPULATION.	COUNTY SEATS.	POPULATION.	COUNTIES.	POPULATION.	COUNTY SEATS.	POPULATION.	COUNTIES.	POPULATION.	COUNTY SEATS.	POPULATION.
Adams,	15,385	Decatur,	1,905	Hendricks,	22,981	Danville,	1,598	Pike,	16,383	Petersburg,	1,193
Allen,	54,763	Fort Wayne,	26,880	Henry,	24,016	New Castle,	2,299	Porter,	17,227	Valparaiso,	4,461
Bartholomew,	22,777	Columbus,	4,813	Howard,	19,584	Kokomo,	4,042	Posey,	20,857	Mount Vernon,	3,730
Benton,	11,108	Fowler,	967	Huntington,	21,805	Huntington,	3,863	Pulaski,	9,851	Winamac,	835
Blackford,	8,020	Hartford City,	1,470	Jackson,	23,050	Brownstown,	849	Putnam,	22,501	Greencastle,	3,644
Boone,	25,922	Lebanon,	2,625	Jasper,	9,464	Rensselaer,	968	Randolph,	26,435	Winchester,	1,958
Brown,	10,264	Nashville,	348	Jay,	19,282	Portland,	1,694	Ripley,	21,627	Versailles,	455
Carroll,	18,345	Delphi,	2,040	Jefferson,	25,977	Madison,	8,945	Rush,	19,238	Rushville,	2,515
Cass,	27,611	Logansport,	11,198	Jennings,	16,453	Vernon,	616	St. Joseph,	33,178	South Bend,	13,280
Clark,	28,610	Jeffersonville,	9,357	Johnson,	19,537	Franklin,	3,116	Scott,	8,343	Scottsburg,	454
Clay,	25,854	Brazil,	3,441	Knox,	26,324	Vincennes,	7,680	Shelby,	25,257	Shelbyville,	3,745
Clinton,	23,472	Frankfort,	2,803	Kosciusko,	26,494	Warsaw,	3,123	Spencer,	22,122	Rockport,	2,382
Crawford,	12,356	Leavenworth,	716	La Grange,	15,630	La Grange,	1,367	Starke,	5,105	Knox,	316
Daviess,	21,552	Washington,	4,323	Lake,	15,091	Crown Point,	1,708	Steuben,	14,645	Angola,	1,280
Dearborn,	26,671	Lawrenceburgh,	4,668	La Porte,	30,985	La Porte,	6,195	Sullivan,	20,336	Sullivan,	2,161
Decatur,	19,779	Greensburg,	3,138	Lawrence,	18,543	Bedford,	2,198	Switzerland,	13,336	Vevay,	1,884
DeKalb,	20,225	Auburn,	1,542	Madison,	27,527	Anderson,	4,126	Tippecanoe,	35,966	La Fayette,	14,860
Delaware,	22,926	Muncie,	5,219	Marion,	102,782	Indianapolis,	75,056	Tipton,	14,407	Tipton,	1,250
Dubois,	15,992	Jasper,	1,040	Marshall,	23,414	Plymouth,	2,570	Union,	7,673	Liberty,	1,096
Elkhart,	33,454	Goshen,	4,123	Martin,	13,475	Shoals,	706	Vanderburgh,	42,193	Evansville,	29,280
Fayette,	11,394	Connersville,	3,228	Miami,	24,083	Peru,	5,280	Vermillion,	12,025	Newport,	591
Floyd,	24,590	New Albany,	16,423	Monroe,	15,875	Bloomington,	2,756	Vigo,	45,658	Terre Haute,	26,042
Fountain,	20,228	Covington,	1,920	Montgomery,	27,316	Crawfordsville,	5,251	Wabash,	25,241	Wabash,	3,800
Franklin,	20,092	Brookville,	1,813	Morgan,	18,900	Martinsville,	1,943	Warren,	11,497	Williamsport,	913
Fulton,	14,301	Rochester,	1,869	Newton,	8,167	Kentland,	982	Warrick,	20,162	Boonville,	1,182
Gibson,	22,742	Princeton,	2,566	Noble,	22,956	Albion,	926	Washington,	18,955	Salem,	1,615
Grant,	23,618	Marion,	3,182	Ohio,	5,563	Rising Sun,	1,806	Wayne,	38,613	Richmond,	12,742
Greene,	22,996	Bloomfield,	988	Orange,	14,363	Paoli,	696	Wells,	18,442	Bluffton,	2,354
Hamilton,	24,801	Noblesville,	2,221	Owen,	15,901	Spencer,	1,655	White,	13,795	Monticello,	1,193
Hancock,	17,123	Greenfield,	2,013	Parke,	19,460	Rockville,	1,684	Whitley,	16,941	Columbia City,	2,244
Harrison,	21,326	Corydon,	763	Perry,	16,997	Cannelton,	1,834				



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